2415/2825 FIGURE 2134

CGCGGCTGCTTCAGCGGCGGGCGGGCGCCAGAAAGGCCCGATCGAAAAGCCTGGGAGGGCCGCCGAACTACCCC CCACTCGCCGGTGGCTGTCCAAGTGCCTGGGATGCAGAATAACATAGCTGATCCAGAAGAACTGTTCACAAAATT AGAGCGCATTGGGAAAGGCTCATTTGGGGAAGTTTTCAAAGGAATTGATAACCGTACCCAGCAAGTCGTTGCTAT TAAAATCATAGACCTTGAGGAAGCCGAAGATGAAATAGAAGACATTCAGCAAGAAATAACTGTCTTGAGTCAATG TGACAGCTCATATGTAACAAAATACTATGGGTCATATTTAAAGGGGTCTAAATTATGGATAATAATGGAATACCT GGGCGGTGGTTCAGCACTGGATCTTCTTCGAGCTGGTCCATTTGATGAGTTCCAGATTGCTACCATGCTAAAGGA AATTTTAAAAGGTCTGGACTATCTGCATTCAGAAAAGAAAATTCACCGAGACATAAAAGCTGCCAATGTCTTGCT CTCAGAACAAGGAGATGTTAAACTTGCTGATTTTGGAGTTGCTGGTCAGCTGACAGATACACAGATTAAAAGAAA TACCTTTGTGGGAACTCCATTTTGGATGGCTCCTGAAGTTATTCAACAGTCAGCTTATGACTCAAAAGCTGACAT TTGGTCATTGGGAATTACTGCTATTGAACTAGCCAAGGGAGAGCCACCTAACTCCGATATGCATCCAATGAGAGT TCTGTTTCTTATTCCCAAAAACAATCCTCCAACTCTTGTTGGAGACTTTACTAAGTCTTTTAAGGAGTTTATTGA TGCTTGCCTGAACAAAGATCCATCATTTCGTCCTACAGCAAAAGAACTTCTGAAACACAAATTCATTGTAAAAAA TTCAAAGAAGACTTCTTATCTGACTGAACTGATAGATCGTTTTAAGAGATGGAAGGCAGAAGGACACAGTGATGA TGAATCTGATTCCGAGGGCTCTGATTCGGAATCTACCAGCAGGGAAAACAATACTCATCCTGAATGGAGCTTTAC CACCGTACGAAAGAAGCCTGATCCAAAGAAAGTACAGAATGGGGCAGAGCAAGATCTTGTGCAAACCCTGAGTTG TTTGTCTATGATAATCACACCTGCATTTGCTGAACTTAAACAGCAGGACGAGAATAACGCTAGCAGGAATCAGGC GATTGAAGAACTCGAGAAAAGTATTGCTGTGGCTGAAGCCGCCTGTCCCGGCATCACAGATAAAATGGTGAAGAA ACTAATTGAAAAATTTCAAAAGTGTTCAGCAGACGAATCCCCC**TAA**GAAACTTATTATTGGCTTCTGTTTCATAT GGACCCAGAGAGCCCCACCAAACCTACGTCAAGATTAACAATGCTTAACCCATGAGCTCCATGTGCCTTTTGGAT CTTTGCAACACTGAAGATTTGGAAGAAGCTATTAAACTATTTTGTGATGGCGTTTATCATTTTATATTTTGAAAG GATTATTTTGTAAGGAATAACTTTTAATACTATAGTTTCACCTGTATTCTAGTAAATGTTGAGACACCGTTTTGC TTTTAAGTATCCCTATTTCTTAAGTTACGAGGATGAATACCTTTCACATTTTGATCTTTAGTTGACTCTACAGTC ATGAAACATACAGGTCTTTCAAAGTCATTCTCAATATTCAGCTTTTGTAAATTATCAAGCTTCAAAAAGCTTTTT TTTTAAAAAAAAAAACATGCATATTCTAAAAATGACTATTGGTGGGGAGGTGTAAATAAGTCATACCTTCTTAAA ACAGAAAATTTAAGTAAAGTCTTTTAAATGAAACCTGTAAAAGTATTGACTCTTCTACCAAGTTGGTATGATATT CCAGGCAGCTCAATGATTATCACATTTGAGACCCTGTGTTTGAAGCATTTACAGGCAATGTACAGCAACAGAGGT ACCTCTTGGTGTATAGTATTTACATTCTCTTTTAGGTAGAAGAGGCAATTTTACCCTTATTTCACATGGTTAGAA ATTTAAAGCAAGATCATTTACCCAAGGATAGGTGTTTGGTAATGTTGAAGGAGTTAGTCTGGCTTCATGTTTTAC ATCTTCAACTAAAATCCCATACTATCTGCTTGGATTTGGAGAGCCAAAAAATAAAGCTGATTGTCATGTGATTAA ATATCTGATCAACAGGTATGAATATAACTTAAATCAGCATATTTTTTGCCATGGTAATAAATTGTCCTATAAACTA TTTATATATTTTTGTTCTTCATAATTATCACTAATAAGCATCAGTTTGTTGTTTTTAAAAGGATATTTAAGTGAG CATTTTCTAGTTCATATGAAAATAACCATAGTACAGGATGATTTCTGTCCACAAAAGGTTAAATTAGATTGCAC TGCCTGCCTAAGTTCTGAACTGGGGCTGTATTTCAGTAGTTGTAGAATTATTGATATTTAGTTTTGATAGCTAAT GTTTAATTGTTTGGATCTGCACAGTTTGGTTTTTGCACAAAAGTCATTTAAAAAAATCTGAGTAATTGTCAAATA TTAAAAGAAAGATATTCTTCCTGTAAGGAATACAGTTTTTAGTCAAAGTGGCCATTACATCCTCTTTTTAATTTA CATAATACAGATACTTGAGAAAGTTGTTGTGGTGTTGTATGCCAAGAAAATTCTTTTTATTGGTGCCTATATTGT AACAATTATTTTAATGCATTGTATTTTGAAGTAACGGTTCAGTTAAATTTTTCACCTGCTGTGTAACTGAAGCA CAATTACAGTTTATAATCATCTGTAGAAGTCTGGAGATAATTTTGCAACTCATGTTATGGGTTAAATGAATATTT TTGTAAAAGTAAAAGCAACAAATTTATAAATTGATTATTTGAAACTTTACAACACAATTGCATCCCAAATACAAA TTGTATTGCTTATTCATTATAGCTATTCGTCCTGTAATCTGTTTCTAGGTGAAGCATACTCCAGTGTTTTAGGGG TTTTGAAAATAATTTTAAATTTCACAGTCAAAAAA

2416/2825 FIGURE 2135

MAHSPVAVQVPGMQNNIADPEELFTKLERIGKGSFGEVFKGIDNRTQQVVAIKIIDLEEAEDEIEDIQQEITVLS QCDSSYVTKYYGSYLKGSKLWIIMEYLGGGSALDLLRAGPFDEFQIATMLKEILKGLDYLHSEKKIHRDIKAANV LLSEQGDVKLADFGVAGQLTDTQIKRNTFVGTPFWMAPEVIQQSAYDSKADIWSLGITAIELAKGEPPNSDMHPM RVLFLIPKNNPPTLVGDFTKSFKEFIDACLNKDPSFRPTAKELLKHKFIVKNSKKTSYLTELIDRFKRWKAEGHS DDESDSEGSDSESTSRENNTHPEWSFTTVRKKPDPKKVQNGAEQDLVQTLSCLSMIITPAFAELKQQDENNASRN QAIEELEKSIAVAEAACPGITDKMVKKLIEKFQKCSADESP

2417/2825 FIGURE 2136

GGCAGACTTAATGAAGTCATTAGAACCTTAACTCAGGTCATTAGTGTCTCTGGGGTGATTGGTCTCCAGTCAAAT GCAGTCTGGCTTCTTGGACATCTTCATCTATCTATCTCATCTCAAGTCAAAGTAGAGCCTCTGTTCCTACTGAC TATAGCTACTTGCCTGAAAGCAGTTTTATTGGAGCAGCTATTGGCTTCTTCATTGCAGGAGGAAAAAAAGGTCCT GAATCTGTGCCTCCTTCCCTTCTTAAAGTAGTGATGAAACCCATAGCAACTGTTGGAGAAAGCTACCAATATCCT CCTGTGAACTGGGCTGCACTTCTCTCTCCACTTATGAGGCTAAATTTTGGTGAAGAGATCCAGCAACTGTGCCTT GAAATTATGGTGACCCAGGCACAGTCATCCCAGAATGCAGCTGCACTATTGGGCTTGTGGGTGACACCACCACTG ATCCACAGTCTGAGTCTGAATACCAAGAGATATCTCCTGATATCTGCACCTCTGTGGATAAAACACATCTCTGAT GAACAGATCCTGGGTTTTGTTGAAAATTTAATGGTGGCAGTTTTTAAAGCAGCTTCCCCACTTGGAAGTCCTGAG CTATGCCCAAGTGCTTTACACGGTCTGAGCCAGGCCATGAAACTGCCCAGCCCTGCCCACCACCTCTGGAGTCTG CTCTCTGAAGCTACTGGGAAAATTTTTTGACCTCCTGCCAAATAAGATTCGGAGAAAGGATCTAGAGCTGTATATC AGCATAGCAAAATGCCTCTTAGAAATGACAGATGATGATGCCAATCGGATCGCCCAGGTTACTAAGAGCAACATA GAAAAAGCTGCCTTTGTCAAACTGTACTTAGTCTCTCAAGGACGATTCCCCTTGGTGAACCTGACCGATATGCTG AGCGTTGCTGCAGCACCGTGAGAAAGAGGTGTTGGCCTGGATGATTCTGCACAGCTTATACCAGGCACGGATT GTGAGCCATGCCAATACGGGCGTTTTGAAGAGAATGGAGTGGCTCTTGGAACTGATGGGTTATATGAAATGTTGC $\tt TTACCAGTCAACATCCTTTCACAATACGGCTCT\underline{TGA} \tt CGAGGCTTTTGGACTTCTTCTTGCTGATATTTTGCAACCGC$ GAATGGCCCGGCTGGGCCAGTACCAAGCTTCCTTGGCAGGAGTCCAATGCACAGGGTCACTCTGCAGGAGGTTCT CTGGCTATTCAGCATCATGGAAAGCCCTAAAGAAGCCCTCTCAGCACAGTCCAGGGATCTTTTGAAAGCCACCCT GCAGTAACCAGCAGCATTCTCAGCTGGATGAGGAAAACCATATAAGTGGAAGAAGTTTTTCAGAATTCATGCCTG GTATTGCTGAGACATGATGCAGAGAGTTAAGGGTCATGAAAAGATGGCCACATCACTGACAGCTTGACACATGCC TCCTAAGAGAGGGGTGCATTGCTTTAGTACCCGGGCCAGTTGAGACTGAAACAGGAACTTGGATTTTCTTTATTT ${\tt GGCTTGAGTTCAATGTGGAGATTTTCTTTGTGAAAGCTTGAAGATATTATCTTCTCCCTGCTAAATTCCAGTAAA}$ ATAATGTTGTCAAAAAAAAAAAAAAAAA

2418/2825 FIGURE 2137

MKPIATVGESYQYPPVNWAALLSPLMRLNFGEEIQQLCLEIMVTQAQSSQNAAALLGLWVTPPLIHSLSLNTKRY LLISAPLWIKHISDEQILGFVENLMVAVFKAASPLGSPELCPSALHGLSQAMKLPSPAHHLWSLLSEATGKIFDL LPNKIRRKDLELYISIAKCLLEMTDDDANRIAQVTKSNIEKAAFVKLYLVSQGRFPLVNLTDMLSVAVQHREKEV LAWMILHSLYQARIVSHANTGVLKRMEWLLELMGYMKCCLPVNILSQYGS

2419/2825 FIGURE 2138

AGAAGGGCAACCTCGTGCTTTCTGCAGAGGAGACCGGAGGGCAGAAGGCAGAGTCCAGGCTTAGACTGCAGTTCC TCGCTTACCTGTGCAGTCTAATTTTGAGCTGCCTCTTTGTAGTCTTAAAAGGCAGGAGCTTCGTGTTGTGGGTCT ${\tt GCTAACCCGTACGTTTCCGTGGGCAAGTCGTGTTACTCCTCGCC} \textbf{ATC} {\tt GCTCAGCTCCAAACACGCTTCTACACT}$ GATAACAAGAAATATGCCGTAGATGTTCCCTTCTCAATCCCTGCTGCTCTGAAATTGCCGACCTTAGTAAC ATCATCAATAAACTACTAAAGGACAAAAATGAGTTCCACAAACATGTGGGGTTTGATTTCCTTATTAAGGGCCAG TTTCTGCGAATGCCCTTGGACAACACATGGAAGTGGAGAACATCTCATCAGAAGAAGTTGTGGAAATAGAATAC GTGGAGAAGTGTACCGCACCCCAGCCAGAGCAATGCATGTTCCATGATGACTGGATCAGTTCAATTAAAGGGGCA ATTGTGGGACATACGGATGTTGTAAAAGATGTGGCCTGGGTGAAAAAAGATGTTTGTCCTGCTTATTATTGAGT GCTTCTATGGATCAGACTATTCTCTTATGGGAGTGGAATGTAGAGAGAAAACAAAGTGAAAGCCCTACACTGCTGT AGAGGTCATGCTGGAAGTGTAGATTCTATAGCTGTTGATGGCTCAGGAACTAAATTTTGCAGTGGCTCCTGGGAT AAGATGCTAAAGATCTGGTCTACAGTCCCTACAGATGAAGATGAAATGGAGGAGTCCACAAATCGACCAAGA AAGAAACAGAAGACAGTTGGGACTAACAAGGACTCCCATAGTGACCCTCTCTGGCCACATGGAGGCAGTT TCCTCAGTTCTGTGGTCAGATGCTGAAGAAATCTGCAGTGCATCTTGGGACCATACAATTAGAGTGTGGGATGTT GGGTCTGGCAGTCTTAAGTCAACTTTGACAGGAAATAAAGTGTTTAATTGTATTTCCTATTCTCCACTTTGTAAA CGTTTAGCATCTGGAAGCACAGATAGGCATATCAGACTGTGGGATCCCCGAACTAAAGATGGTTCTTTGGTGTCG CTGTCCCTAACGTCACATACTGGTTGGGTGACATCAGTAAAATGGTCTCCTACCCATGAACAGCAGCTGATTTCA GGATCTTTAGATAACATTGTTAAGCTGTGGGATACAAGAAGTTGTAAGGCTCCTCTATGATCTGGCTGCTCAT ${\tt GAAGACAAAGTTCTGAGTGTAGACTGGACAGACACAGGGCTACTTCTGAGTGGAGGAGCAGACAATAAATTGTAT}$ ${\tt TCCTACAGATATTCACCTACCACTTCCCATGTTGGGGCA} \underline{{\tt TGA}} {\tt AAGTGAACAATAATTTGACTATAGAGATTATTT}$ CTGTAAATGAAATTGGTAGAGAACCATGAAATTACATAGATGCAGATGCAGAAAGCAGCCTTTTGAAGTTTATAT AATGTTTTCACCCTTCATAACAGCTAACGTATCACTTTTTCTTATTTTGTATTTATAATAAGATAGGTTGTGTTT ATGAAATACAAACTGTGGCATACATTCTCTATACAAACTTGAAATTAAACTGAGTTTTACATTTCTCTTT

2420/2825 FIGURE 2139

MAQLQTRFYTDNKKYAVDDVPFSIPAASEIADLSNIINKLLKDKNEFHKHVEFDFLIKGQFLRMPLDKHMEVENI SSEEVVEIEYVEKCTAPQPEQCMFHDDWISSIKGAEEWILTGSYDKTSRIWSLEGKSIMTIVGHTDVVKDVAWVK KDSLSCLLLSASMDQTILLWEWNVERNKVKALHCCRGHAGSVDSIAVDGSGTKFCSGSWDKMLKIWSTVPTDEED EMEESTNRPRKKQKTEQLGLTRTPIVTLSGHMEAVSSVLWSDAEEICSASWDHTIRVWDVGSGSLKSTLTGNKVF NCISYSPLCKRLASGSTDRHIRLWDPRTKDGSLVSLSLTSHTGWVTSVKWSPTHEQQLISGSLDNIVKLWDTRSC KAPLYDLAAHEDKVLSVDWTDTGLLLSGGADNKLYSYRYSPTTSHVGA

FIGURE 2140

 ${\tt GCGGCGGCGCTGGAGGCCTGTGAGAGCCGCAGCCCGGAGCGCCCGGCTTCCCACGCC}$ CCGCCTTTCCCCACTGGGGGTGGCAGTGTTTTGTCTGCTGGGGCTCGGCGTGCTCTACCACCTCTACTCGGGCTT CGATGGGGGCACCGTGGACTTGCGCGAGATGCTGGCTGTCTCAGTGCTGGCCGCAGTCCGCGGCGCGACGAGGT GAGGCGCGTCCGCGAGAGCAACGTCCTCCACGAGAAGTCCAAGGGGAAGACGCGCGAGGGAGCCGAGGACAAGAT GACCAGCGGCGACGTGCTGCCAACCGCAAGATGTTCTACCTGCTCAAGACCGCCTTCCCCAGCGTCCAGATTAA TACTGAGGAACACGTGGATGCAGCTGATCAGGAGGTTATCTTGTGGGGATCATAAGATTCCTGAGGATATCCTAAA GGAAGTAACTACTCCTAAAGAGGTACCAGCAGAAAGTGTTACTGTCTGGATTGACCCACTTGATGCTACACAGGA TATACATAAGCCATTTTCCGAATATACAGCTTGGGCAATGGTAGATGGTGGTTCAAATGTGAAAGCCCGCTCTTC CTACAATGAGAAGACCCCAAGGATCGTTGTGTCTCGTTCCCATTCAGGGATGGTCAAACAGGTCGCTCTTCAGAC TTTTGGAAACCAGACTACAATTATCCCAGCTGGTGGTGCTGGTTATAAAGTTTTAGCACTTTTGGATGTGCCTGA TGAAGGGGGACTCCTTGCTAGCATCAGAATGAACCACCAGGCCCTGGTCAGAAAACTCCCAGATCTAGAAAAGAC AGGACATAAA**TGA**GCATAACTGATTACAGGGTACAGTTCTTCACAGCTGAAATGGTTAGCCTGAGATGCTGGAAG CTTCAAAGGATTGGTGGAGACTATGCATGGTTAAGGCCATCCCGAACTTTTTAAAGTATTTATGAAGCATCAGAG ACTTATTTCCCTGTAATAGAATGCAAAATCAGGGAAAATGGGTTGCTTTGTGTCTCAAGTATTGTCTTTATTT AAAAAAAAAAAAAA

2422/2825 FIGURE 2141

MAPMGIRLSPLGVAVFCLLGLGVLYHLYSGFLAGRFSLFGLGGEPGGGAAGPAAAADGGTVDLREMLAVSVLAAV RGGDEVRRVRESNVLHEKSKGKTREGAEDKMTSGDVLSNRKMFYLLKTAFPSVQINTEEHVDAADQEVILWDHKI PEDILKEVTTPKEVPAESVTVWIDPLDATQEYTEDLRKYVTTMVCVAVNGKPMLGVIHKPFSEYTAWAMVDGGSN VKARSSYNEKTPRIVVSRSHSGMVKQVALQTFGNQTTIIPAGGAGYKVLALLDVPDKSQEKADLYIHVTYIKKWD ICAGNAILKALGGHMTTLSGEEISYTGSDGIEGGLLASIRMNHQALVRKLPDLEKTGHK

2423/2825 FIGURE 2142

CTGATTGGAAGGAGCCGAGCGCAGCTTTGCGGGCCCGACCGGCTCCGCGTGGCAGGTGAAGTGCACCGGTTT AGAACCTCTGACGTCTCTCAAGCCACTTTAGCCAGTGTAGCCCCAGTATTTACTGTGACAAAATTTGACAAACAG GGAAACGTTACTTCTTTTGAAAGGAAGAAAACTGAATTATACCAAGAGTTAGGTCTTCAAGCCAGAGATTTGAGA TTTCAGCATGTAATGAGTATCACAGTCAGAAACAATAGGATTATCATGAGAATGGAGTATTTGAAAGCTGTGATA ACTCCAGAGTGTCTTCTGATATTAGATTATCGTAATTTAAACTTAGAGCAATGGCTGTTCCGGGAACTCCCTTCA CAGTTGTCTGGAGAGGGTCAACTCGTTACATACCCTTTACCTTTTGAGTTTAGAGCTATAGAAGCACTCCTGCAA TATTGGATCAACACCCTTCAGGGGAAACTTAGCATTTTGCAGCCACTGATCCTTGAGACCTTGGATGCTTTGGTG GACCCCAAACATTCTTCTGTAGACAGAAGCAAACTGCACATTTTACTACAGAATGGCAAAAGTCTATCAGAGTTA GAAACAGATATTAAAATTTTCAAAGAGTCAATTTTGGAGATCTTGGATGAGGAAGAGTTGCTAGAAGAGCTCTGT GTATCAAAATGGAGTGACCCACAAGTCTTTGAAAAGGCAGTGCTGGGATTGACCATGCAGAAGAAATGGAGTTG TCACAAAGTATTATTTTCATTAATCTGGACAGCCACCGAAACGTGATGATGAGGTTGAATCTACAGCTGACCATG GACCATAGAATTTTTTGGCTGATTACAGGAATTATGTTCATGGGAAGTGGCCTCATCTGGAGGCGCCTGCTTTCA TTCCTTGGACGACAGCTAGAAGCTCCATTGCCTCCTATGATGGCTTCTTTACCTAAAAAGACTCTTCTGGCAGAT

2424/2825 FIGURE 2143

MECLRSLPCLLPRAMRLPRRTLCALALDVTSVGPPVAACGRRANLIGRSRAAQLCGPDRLRVAGEVHRFRTSDVS QATLASVAPVFTVTKFDKQGNVTSFERKKTELYQELGLQARDLRFQHVMSITVRNNRIIMRMEYLKAVITPECLL ILDYRNLNLEQWLFRELPSQLSGEGQLVTYPLPFEFRAIEALLQYWINTLQGKLSILQPLILETLDALVDPKHSS VDRSKLHILLQNGKSLSELETDIKIFKESILEILDEEELLEELCVSKWSDPQVFEKSSAGIDHAEEMELLLENYY RLADDLSNAARELRVLIDDSQSIIFINLDSHRNVMMRLNLQLTMGTFSLSLFGLMGVAFGMNLESSLEEDHRIFW LITGIMFMGSGLIWRRLLSFLGRQLEAPLPPMMASLPKKTLLADRSMELKNSLRLDGLGSGRSILTNR

2425/2825 FIGURE 2144

2426/2825 FIGURE 2145

MTSFRLALIQLQISSIKSDNVTRACSFIREAATQGAKIVSLPECFNSPYGAKYFPEYAEKIPGESTQKLSEVAKE CSIYLIGGSIPEEDAGKLYNTCAVFGPDGTLLAKYRKIHLFDIDVPGKITFQESKTLSPGDSFSTFDTPYCRVGL GICYDMRFAELAQIYAQRGCQLLVYPGAFNLTTGPAHWELLQRSRAVDNQVYVATASPARDDKASYVAWGHSTVV NPWGEVLAKAGTEEAIVYSDIDLKKLAEIRQQIPVFRQKRSDLYAVEMKKP

2427/2825 FIGURE 2146

 $\tt CGGAAGCAGGAAGTGAGTTTGCGAACGGAGCAGCTGCTGCAGGGCCC{\color{blue} ATG} GCGGACACCCAGTACATCCTGCCCA{\color{blue} ATG} CCCA{\color{blue} ATG$ ATGACATCGGCGTGTCTAGCCTGGACTGCCGTGAGGCCTTCCGCCTGCTGTCACCCACAGAGCGCCTCTATGCCT ${\tt ACCACCTGTCCCGTGCCGCTGGTACGGAGGCCTGGCTGCTGCTTCAGACCTCCCCTGAGGCCCCCTACATCT}$ ATGCTCTGCTCAGCCGCCTCTTCCGCGCCCAGGACCCCGACCAGCTGCGCCAACATGCCCTGGCTGAAGGCCTTA CCGAGGAGGAGTATCAGGCGTTCCTGGTCTATGCCGCGGGTGTTTACTCCAACATGGGCAACTACAAGTCCTTTG $\tt GTGACACCAAGTTTGTTCCCAACTTGCCCAAGGAAAAGCTGGAACGGGTGATCCTAGGGAGTGAGGCTGCTCAGC$ AGCACCCAGAAGAAGTCAGGGGCCTCTGGCAGACCTGCGGGGGAGCTTATGTTCTCTCTGGAGCCAAGGCTTCGAC ACCTCGGACTGGGGAAGGAGGGAATCACCACCTATTTCTCTGGGAATTGTACCATGGAAGATGCCAAATTGGCCC AGGACTTTCTGGACTCACAGAACCTCAGTGCCTACAACACCCCGGCTCTTCAAAGAGGTCGATGGAGAAGGGAAGC CCTACTACGAGGTGCGCTTCTGTGCTTGGCTCAGAGCCTTCCCTGGACTCTGAGGTGACTTCCAAGCTGA AGAGCTATGAATTCCGGGGAAGCCCTTTCCAGGTGACCCGGGGGGACTACGCGCCCATCCTCCAGAAGGTGGTGG AGCAGCTGGAGAAAGCCAAGGCCTATGCAGCCAACAGCCACCAGGGGCAGATGCTGGCCCAGTATATAGAGAGCT TCACCCAGGGCTCCATCGAGGCCCACAAGAGGGGCTCCCGCTTCTGGATCCAGGACAAAGGCCCCATCGTGGAGA GTTACATCGGGTTCATCGAGAGCTACCGCGACCCCTTTGGTTCCCGAGGAGAATTTGAAGGTTTCGTAGCTGTGG CCCCAACCTTTGAGAAGGACAAGTTCCTCACCCTGACTTCACCTCCCTGGATGTTCTCACCTTCGCTGGCTCCG GCATCCCTGCCGGCATCAACATCCCCAACTACGATGATCTGAGGCAGACGGAAGGCTTTAAGAACGTGTCGCTGG GGAATGTGCTGGCTGTGGCCTACGCCACGCAGCGGGAGAAGCTTACCTTTCTGGAGGAGGATGACAAGGACCTGT ACATCCTCTGGAAGGGGCCCTCCTTCGATGTGCAGGTGGGCCTGCACGAGCTGCTGGGCCATGGCAGTGGCAAGC TCTTCGTACAGGACGAAAAAGGAGCATTCAACTTTGACCAGGAAACAGTGATCAACCCAGAGACGGGCGAGCAGA TTCAGAGCTGGTATCGGAGCGGGGAGACCTGGGATAGCAAGTTCAGCACCATCGCCTCCAGCTACGAAGAGTGCC GGGCTGAGAGCGTGGGTCTCTACCTCTGTCTCCACCCGCAAGTGCTGGAGATCTTTGGCTTTGAGGGGGGCTGATG AGGCCTTCAACTGGCGACAGGCCCATATGCAGGCCCGGTTTGTGATCCTGAGAGTCTTGCTGGAGGCTGGCGAGG GACTCGTTACCATCACTCCCACCACAGGCTCCGATGGGCGCCCAGATGCCCGGGTCCGCCTCGACCGCAGCAAGA TCCGGTCTGTGGGCAAGCCTGCTCTAGAGCGCTTCCTGCGGAGACTTCAGGTGCTGAAGTCCACAGGGGATGTGG CCGGAGGCCGGGCCCTGTACGAGGGGTATGCAACGGTCACTGATGCGCCCCCGAGTGCTTCCTCACCCTCAGGG ACACGGTGCTGCGTAAGGAATCTCGGAAGCTCATTGTTCAGCCCAACACTCGCCTTGAAGGCTCAGACGTGC AGCTTCTGGAATACGAGGCGTCAGCTGGCCTCATCCGATCCTTCTCTGAGCGTTTCCCAGAGGATGGACCCG AGTTGGAGGAGATCCTCACACAGCTGGCCACAGCCGATGCCCGATTCTGGAAGGGCCCCAGTGAGGCCCCATCTG GCCAAGCT<u>TGA</u>GGAAGATGTGTGGCCTTGCCCCCAATTCCATCAGACCAAGGCTGCAAGTGGCCCTCCATTCGTG CAACCCCTTCCATTTGTCAGCACTTTCCAGCCTGCCAATTGCTTCCCCTCTGTGATCTCATTTCATCTGCACTGC CATACGTGGAGTGAGCAAGACAGGGCTTACCATCCTGTCTACCAGATGAGGAAATGGCAGTTCTGAGAAGTCACT GGTCTAGATCCCGCAGGTGGCACGTGACAGCTAGGGTTCAAAACGTTCTCACCAAATCCAATGCTCCTCACATAT

2428/2825 FIGURE 2147

MADTQYILPNDIGVSSLDCREAFRLLSPTERLYAYHLSRAAWYGGLAVLLQTSPEAPYIYALLSRLFRAQDPDQL RQHALAEGLTEEEYQAFLVYAAGVYSNMGNYKSFGDTKFVPNLPKEKLERVILGSEAAQQHPEEVRGLWHTCGEL MFSLEPRLRHLGLGKEGITTYFSGNCTMEDAKLAQDFLDSQNLSAYNTRLFKEVDGEGKPYYEVRLASVLGSEPS LDSEVTSKLKSYEFRGSPFQVTRGDYAPILQKVVEQLEKAKAYAANSHQGQMLAQYIESFTQGSIEAHKRGSRFW IQDKGPIVESYIGFIESYRDPFGSRGEFEGFVAVVNKAMSAKFERLVASAEQLLKELPWPPTFEKDKFLTPDFTS LDVLTFAGSGIPAGINIPNYDDLRQTEGFKNVSLGNVLAVAYATQREKLTFLEEDDKDLYILWKGPSFDVQVGLH ELLGHGSGKLFVQDEKGAFNFDQETVINPETGEQIQSWYRSGETWDSKFSTIASSYEECRAESVGLYLCLHPQVL EIFGFEGADAEDVIYVNWLNMVRAGLLALEFYTPEAFNWRQAHMQARFVILRVLLEAGEGLVTITPTTGSDGRPD ARVRLDRSKIRSVGKPALERFLRRLQVLKSTGDVAGGRALYEGYATVTDAPPECFLTLRDTVLLRKESRKLIVQP NTHLEGSDVQLLEYEASAAGLIRSFSERFPEDGPELEEILTQLATADARFWKGPSEAPSGQA

2429/2825 FIGURE 2148

GACCACTGGTAGCGGCAGCAGCTCGCGCCCGCGCCCTCCTCGTACCCGTGCGCCCCCGGAGACCGATCCCGCCCC GCGGCCCAGGCCGGGCCTGAACCCAGCGGGTGCCGCTTCTCCACCCGAGGCTTCCACCTCCAACGAGCCATGTTC CAGGCTGCAGGAGCCGCCCAGGCCACCCCCTCTCATGACGCCAAAGGCGGCGGCAGCAGCACGGTGCAGCGCTCC AAGTCCTTCAGCCTGCGGGCCCAGGTGAAGGAGACCTGCGCCGCCTGCCAGAAGACCGTGTACCCCATGGAGCGG CTGGTGGCCGACAAGCTCATTTTCCACAACTCTTGCTTCTGCTGCAAGCACTGTCACACCAAGCTCAGCCTGGGC GACGAGGGGTTTGGCCGCAAGCAGCACAAGGAGCTCTGGGCCCACAAGGAGGTGGACCCCGGCACCAAGACGGCC TGAGGCCTCTGTAACCTTCCACCCCCTCTGCGGAAGGCCTGGAGCCGGCAGGGGGAAGGTGGGAAGGAGGTCGAG $\tt CTGGGCTTGCGTGGGGCCCAGGTGGGAAGGGGATGAGGCTTGCTCAGGCGTAGGGGACCAGGGCAGGGCTCTGCT$ CCAGGACTCCTTCCTTCTCCCCCCCAGCCGGTGAGGGTTTGGAAACCAGGATTGGGGTCTGCCCACCACC CTGCTTCCTGCTTCGTTCAGCCTCCCCCCCCCCCCCCAGGACCCCCTGGGAGGCCCCCAAGCCCAGCTCCC CTATCTAGGTGCCTTTTCTCCAGCAAGGAGTCAGCATGCCCCCCTCAGGGTCCCAAGCTCCCTCACTGCCACCGG AGACTGTGTGGCCCCCACGTCTCCCCATCTACCTCTACCCTTAACCTGTTTCTGAGCCACGGAGACAGGGAGAAA GGAGCGCGACAGTGCCACCTGTTGGGCATCATAAATGCCCCTGCAGCCCATGGGGGAGGAGATGGGGAAGTGGAG CCACCTGCCTCTGCAGGGCAAGGCAGGGCCTGCCCCAGTGGGGCTTGGGACCATCTCGAACCACCAGCGTGGAG AAGCAGAAGCAAAAGCACTCGCCAGGCTGCAGCCTCAGGCACTGGCAGGGGCTGGTGCGGCCCCACTCCCCTCCC $\tt CCGCTCCCATTTGTGCCCATCCTGTTGTGACCAACCCCGTTTTAAACATGTTTCAATAGATCCAGATTCTCTATT$ GTGTGGCCTGCTGGGGGATCTGTCACAGGAAGGGTGCAGACTCACCATGGGGCGGCATGGGGGGACAGGGCCAG $\tt CCCCGACTACCTCGGCCCTGATGGGGGCCAGGGAGCTAGAAGTGGGTGTCAGTTCCCTGACACCATTGAGAAAT$ GGGAGGCTCCTCTCACAGCGAGGGCTTCATGCTGTCACACCCACAGTGGTTTTTGGAACTGAAACTCCACCTCA CCCCTCAGTTCTGGGTTGGTTCAGACCCACCAACTTACCATATGCACCCCATTGTGAAGAGGCCTGAGAGCGGGA GGGCCAGGCTGCCAGTGGGTGATGGCGCCTGTCCTCGCTGCACTTCAGTGCCTGGGGTGCAAGCTGCCGCGTTCC $\tt CGGTAACCAGCAGACCCAGCAGTGCTGCCCAAGGTTTTAGTGACCCCTGGATTGTCCCCCCTCATCATTACCCC$ TCGCTGCTGTCATCATCCCCTTGCCTTTTCAAGCTCTGCGGAGGTGCAGTCACAGCTACTGTCTCAGGAAATCCA AAGAGAAACTACCTCTGCTTCTCTGAAAACCCAGGGACAATGAGGGATGAGTTCACAGCAGAGCAAACCAGGCAA GTTGGGAGGACCTGAGGGCGCCCCGGTGGGACACAGGCAGAAGTCTGGGTTGTCCTGCTCCAGATTCAACTTCCT GATGTCTCCAGACATGGGATCGATGAGAACAGAGACTCCTGGAGGGTTTGCTGCCACCACACCATACAACTGCCT GAGTTCCTAAGTGGCCTCCCCGTGGAACAGGGCAGGGAGCTGGGCCACAGGCTCCAGTGTCACATAAGTCACTAT GCTGAGGCAGGCACTGCTCCTCGAGGGAGCCGAATACTCAGCAGAGATGGTGCCCCGGCCTGGATCCTCCC AAGTGTGAAGTGAGCGCCTCAGAGCCTCTCAGGGCAGGCCAACTTCCTGCACCAGAGGTCTCAGATGGCAAGGAT CATCTTGGTTCGGTTAAGCAACAGTAGCAGATGACCACAAGGGGGGTACTGGAGAGGTGGCTCTTGGAGACACCTG ACCCTGCCCTGCAAAGATGGGGCTGAAGGAAGTCCTCTGGGCCAGGAAGACCCTACCAAATATCATGAAAGCTC CGGGAACTCAGCCACTGGTGACGTTCAGGTTGTGAGGGCCAGCAGTGCCACCCTGGTAAATCAGCCCTGTTGGGA $\tt CCACCCCAGTGGAGGTCCTGGAGGGGCAACTGGAGGAAAGGGGCAGACACCTCTGGACTGACAATGGTATCAGCC$ AGATCACCCCAGGACCCCTCTACTTGGAGTCAAGTTCTCTTCTGCTTGAAAGGCCCAGGCTCGTTGCCAGGCACC ATACCTGGCCCCTGCTAAGCAAAAACCTACCTCCACCCCCACAACTGAAAGCACTGCCACAGGACCCCTCTGAT ATAAATGATCCCTTTTATTGTAAGTAATGCGCAACACTGGCCTGGCTTTGCACTGCAAGCCCTCGGTCAAGATAT AGTCAAATAACTATGGCTGCAGGTTCCACAGTTCCACAATAACCATGGCTGCACGATCCACAATTCAGACACAGA ${\tt CATAGAGCTGGGGTGGGAAGGGGCAGGAGGGTGCCAGAGTGCGGACTGTCCCCAGCCCTGGCCTCTCCATGCCCTGGCCTCTCCATGCCCTGGCCTGGCCTGGCCTGGCCTCTCCATGCCCTGGCCTGGCCTGGCCTGGCCTCTCCATGCCCTGGCTGGCCTGGCCTGGCTG$ AGAGTTGGCCCAGGCAGACACCCCATGGAATGATGAGAAAGTGACGGCACGGCCCCTTCCCACAGCAAGCCTG GGGCTGCCAGGAACTGCCCTTCAGAACCTTTGGGCCCAGGTCACCCTGAAGCCCCACAACTTTTTATCTGGATTA GTTATTAAAAAACAATAAATTAAGCAAC

2430/2825 FIGURE 2149

 ${\tt MFQAAGAAQATPSHDAKGGGSSTVQRSKSFSLRAQVKETCAACQKTVYPMERLVADKLIFHNSCFCCKHCHTKLS}\\ {\tt LGSYAALHGEFYCKPHFQQLFKSKGNYDEGFGRKQHKELWAHKEVDPGTKTA}$

2431/2825 FIGURE 2150

CGTGTCACCCCGGCGCCGACGGCCCTGTGCAGGGGAAGCAG<u>A**TG**</u>GAGTTCAAGCTGGAGGCTCATCGCATCGTCA GCATCTCTCTGGGCAAGATCTACAACTCGCGGGTCCAGCGCGGCGCATCAAGCTGCATAAGAACCTCCTGGTCT CGCTGGTGCTGCGCAGCCCCGCCAAGTCTACCTGAGCGACCCGTGCCCGGCCTCTACCTGGCCGGTCCCGCTG CCCCGCCGCCGCTCGTGCCTCTTGGCCGGAGACCGAGCCGCAGCCGGAGCGCTCCTCCGTCTCAGACGCGCCGC GGGTAGGGGACGAGGTGCCACGGTGACTGGAGTCGGGGACGTTTTTCAGGGCGGAGAGGCGGACGCGA CGGAAGCTGCCTGGAGCCGCGTGGAGGGGCCGCCAGGCGGCCGCCAGAGAAGCCGAGGGTACCGCCGGAGGCT GGGGCGTCTTCCCCGAGGTATCTCGTGCCGCGCCCCCCTGCGGCTGCCCCCTAGGCGGGGAGGACCCGCCGG CCCCGCTCAAGAAGCCCCGCCGGAACTTAGAGCAGCCGCCGAGTGGAGGAGGACGACGACGACGAGGAGGAGATGG AGACCGGGAACGTGGCTAACCTCATCAGCATCTTCGGTTCCAGTTTCTCGGGACTCCTACGGAAAAGCCCCGGGG CGGTGCTGAGAGACATGAACCCCTGGAGCACAGCCATCGTGGCCTTCTGAGCCCTTGGTCCCCTGCGGGGAGGA GGTGGAGCAGCGGCGTCCCCGAAGTGAGGGCCAGGCCCTTCCCGGCTGCGAGGACGCCCAGAGACCGCGGGCGC TGAGCGCGTTGGGCAGACTGGTTGCCTCTGGGCATCGCAAACTGCCCCCGGGCGCATCTGGCTTATCTGGAGACC CTTGTGGCATTAAGACTATTTTGCTCTTCTGGAATGCACCACTCCTTCCCCAGGGTTTAAGAGATTGGGGGCAGA CAGGGACTTTCCTCTGCCGGCTGCGTGGAGAAGGAAGCGGCTAAAAGGTTTGGGCCGGGGAGTTCCCCATTCGTT CTCCGGGGAGGGAGGGACTTTACACCTACCCTCACCGGAAAGCTAGACCCGCTTCAGGGCCAGGAGTGGCGTTT TTCTCTCCCAATGAAGAACGTTTATATCCTGTGATTACTCTAGGAAAGGGGCGTATTAACGGTCCTTTGCTTCC CCGCAGGGGAGAAAAAGCTTGACGAACTTCACAGAAGAGTTCAAGCTTGGAAATAATGGAGTTTATAGAGAAAAAG ATATATTTTTAAAAGCTCTAGGTCAGAAGTACTACACAGTGCTTTTAAAAAGTGTTTAATGAGAGTTTTACAGACA GAAGCCCGAAGTGGAAAGACCTTATGGTTTTGTAGATATGGTGACTCCAGTCTTTGTTGTATAAAGGTTGGGGGA GCTGATAAGGTTTTTGTACAGTATTTTCTCCTTCGTTGTATTGATTTTTTTGTATAAAAATGTAACTTCTACGTGTC

2432/2825 FIGURE 2151

MEFKLEAHRIVSISLGKIYNSRVQRGGIKLHKNLLVSLVLRSARQVYLSDPCPGLYLAGPAGTPAPPPQQQPGEP AAGPPAGWGEPPPPAARASWPETEPQPERSSVSDAPRVGDEVPVATVTGVGDVFQGGEADATEAAWSRVEGPRQA AAREAEGTAGGWGVFPEVSRAARRPCGCPLGGEDPPGTPAATPRAACCCAPRPAEDEPPAPPAVCPRKRCAAGVG GGPAGCPAPGSTPLKKPRRNLEQPPSGGEDDDAEEMETGNVANLISIFGSSFSGLLRKSPGGGREEEEGEESGPE AAEPGQICCDKPVLRDMNPWSTAIVAF

2433/2825 FIGURE 2152

CTGCCTCGTGTCTTTGTAGCTGATTCAGAGAGTTTGAATTGTGGGGTGGGAGACTAACTTCAGCTCCAGGCTGCA CAAATATATCATTTTTCCTAATTGGTTCTTGACGTGCAGTGGACTGGCTCTGTGAATGATTGGCAGGGTCTTAGT TTTGCGAGAGCATTTCCTTCTAAGAATTATTGTGATCTGCAGAAACAGCCATTTGATTCAAAAAATCATGTAGAAA AGGAGTAGGAGAAGCAAAACGTTTCATTTTTGGGCCTTAACCATTTGAAATGTTTGGACTTTAAACATAAAGCCA TGATTTTTAATGCTGTTAAGATACTTTTGTAAAACTGTAGGAACAAGAGTAATTAGACCAAATTGAAGCTTAGGG GTTGACTGTCCCCTTAGGTGTATAAGGAGAAAAGTTGACATGTCTGGGACCTCTGACATGTGTACACATGCTTGC ACACATGCACACACTGAATGTTTTAAGTTATACAAACATAAGACCTTAAGATGCAAAGAGCCAGAATATTCTA AAGAGGTGATGAACAGAGGGGGTGGAAACTGCATCACAGATGTTTTCCAAGGGCCAGGGTGGAATCTGAGCTCTA ACCAAATTGAAGGCTTTCTTGTAATTCACAAGCAGCAGCTCTCCAGCATCTCTCCGTAGCCTGGGTGAAGTCCCA AGTGAAGAAACAAGGAGGCACTTCCTGTAGGAGCACTGATGTGCCTTGTCCACACTCCCCTCTGAGCTTTACTGG TAAGAGAGCTCCGACTGAACATGCTGAGCAGTTGAGCACTTTTCCATCAGCAACAACAGCGAGGATGGAAATGGA AAGGAACCGAACTAAAATGCATTTCCCTTTGCAGGGCAGAGAGCTAAGCTCTTAGGAATAGTGTTATAGAAATAA GCACCCTAACTTCAATTCCTGAAA**TG**TTGGTTAATGGAGAGAATTTTGGAGTTTCACTTAATATTTTCCCATCG GTCGCCATAAATAAGTCTTCAGGCGCTCCTAGAAGAGTCCCAGCCCAAGGCTCGATTAAGGACCACACTGCAGGT CTGAGGCTCACTGCTCTGAGTCCTGAACACCAGAGCCCTGCAGAGAGTGGTGATAACACATCATCTCTGCAAAGA GGAACCTCTCCCCGGCCGCCACTTCACTCAGGCTTCTACTGAGCAGCAAGGACAGCCTGGGTTTCAAATGCCAC $\tt TTCCCCTGCTTTAGGGATCCAGGTGTCCTGATAGCG{\bf TGA}CCCTGCTGAGGCAAGGTATCAACTCCGAGAGTGACT$ GAGTCACTGAGCGTGGCACATGAACAACGTCATGACAAAGATTCTCTGAGTGAAGTTAACACCACGTATTTTAC TGGAAATGGCTAACGTTTCCTTTCTAGGGGAAGGGTCGAGGAATACTCAAGTGCTAGCTTAGCAGCTTTGTTCAG TCCAGATCAGAGCTGTTAGGTAAAGGCCTAACCACCTCCCTGCAGTCTCTTATATCTCAAGCTTTAGGAACCCAT TTCTAAATGTACACTAGCGGAGAATTTATATTGTCAGCCTTGATTACCATAGGACAGGCAGAAAGGCGATAATTT GTATCTTTAATATAAAAGAAGCTTTTAACTTTTCCAGCCTATTATAATAACTGAGTTATATTCACTGTGGCTCA AACTAATTGGCATTGTGGAACATTTCTTTACCTTCAAAGTTTTCTCCACCAATCATTCAGTTCTATTGCAGTCC TGGTGCCATATGTCCCCTGCAAATTGTGAAAGTAATTAGTGACAAAATAGCAGCCTGCTCCTTTTCAATGGCGAA ACTGTCGGCATTAGCAGTTTTGGGTAAGCTGGCGGTACTATAACACGTACTGGAAACCTGTTCCTCATCACCACC TACCAGATTCTGGAAATGCCGTCTTCTAGAAAACGATGGCGTTTTGTGGTGGTCTTCTTTTGAAAGGAACAGTAAT TTGTGTGGATATTGTTAAAGTGTTTAAAGAATATTTTTGACAATTAAGTTTACATTTTACAATTGCTTTATTTTTT ATTAAAATAGTTGTATATAAATATTACCCTATTTCACTGTTGTTCAAGTAAATCTAAACCTTGTAGACAAGTGAG TCATCTGATATGTATAGAAGCTGTGATATATAGAGTACATTTATTGTGTAAATGTTTATGAATATAATTGTTCCT GTGTTTTTATAAGTTGGGGATATTTTGTTGTTTTTACGGCAACAAAATTTATTGCATTTAAATGGTTTTTATGTAA TAAATCCAACAAATTTCAAAAAAAAAAAAAAAAAAAAA

2434/2825 FIGURE 2153

 ${\tt MLVNGENFGVSLNIFPSVAINKSSGAPRRVPAQGSIKDHTAGLRLTALSPEHQSPAESGDNTSSLQRGTSPPAATSLRLLLSSKDSLGFKCHFPCFRDPGVLIA}$

2435/2825 FIGURE 2154

CAGTTAGCTTCAAACAAAAACGAAAGTTAGACCAAGGGAACGTATTAGAT**ATG**GAAGTAAAGAAAAAGAAACATG ATAAACAAGAACAGAAAGGAAGTGTGGGAGCTACATTCAAATTAGGTGACTCTTTGTCAAACCCAAACGAAAGAG CCATTGTTAAAGAAAGATGGTATCAAATACTAAGTCTGTAGACACGAAAGCGAGTTCATCTAAATTTAGTAGAA TTCTAACTCCTAAGGAGTATTTACAAAGGCAGAAGCATAAAGAAGCTCCGAGTAATAAAGCATCGAAGAAAATCT GTGTGAAAAACGTGCCATGTGATTCTGAACATATGAGACCAAGTAAACTTGCCGTGCAGGTTGAAAGTTGTGGGA AATCAAATGAGAAACACAGCAGCGGCGTGCAGACCTCTAAAGAATCATTAAATGGCTTGACAAGCCATGGTAAAA ACCTCAAAATCCACCATTCTCAGGAGTCTAAAACATACAACATTCTAAGGAATGTTAAAGAAAAAGTTGGTGGGA AGCAGCCTGATAAAATATGGATTGATAAGACTAAATTAGACAAATTAACCAATATAAGCAACGAAGCTCAATTCA GCCAAATGCCTCCCCAAGTAAAGGATCAAAAGAAATTATCTGAATAGAGTTGGGTTTAAATGCACTGAACGTG AAAGCATTTCTCTCACCAAATTAGAAAGTTCACCCAGGAAGCTTCATAAAGATAAGAGACAGGAAAATAAACATA AGACCTTTTTACCGGTGAAAGGTAACACAGAAAAATCAAACATGCTGGAGTTTAAATTATGTCCAGATATCTTAC $\verb|TTTCAGGAATAAAAGTACAAAAGAAGACTGGTTAAAATTTGTTGCTACAAAGAAAAGGACACAGAAAGACAGCC|$ AAGAGAGATAATGTTAATTCAAGACTCTCGAAGAGAGCTTCAGTGCAGATGGATTTGAGATGCTACAAAACC CAGTAAAAGATTCAAAAGAAATGTTTCAAACCTACAAACAGATGTACCTGGAGAAGAAGAAGCAGAAGCCTTGGTA TATTTCGCTGAAACTAATGAGAAATGCCATGATAAAGATTTCTCAGAGTTTGGTTCCCACTTTCATTGTATTTCA AACAAGGTATTTGAATTTCTACTTTATTGAACCAGATTTACCATTATTTTAAAAGGAATGCTTATACAAATCAAT GTTTTGGTTTCTAAGCTATATTAGCAAAATTTATTTTTCAAAAACGCCCACTGTGATGTGAATGTCAAAATATAT TCTTAAGTGTTTTATAACTAATTGTAAACTTTTTTTCAGAAGTCTTATTTTATACTTGTGAAACTGAACACAATT

2436/2825 FIGURE 2155

MEVKKKKHDKQEQKGSVGATFKLGDSLSNPNERAIVKEKMVSNTKSVDTKASSSKFSRILTPKEYLQRQKHKEAP SNKASKKICVKNVPCDSEHMRPSKLAVQVESCGKSNEKHSSGVQTSKESLNGLTSHGKNLKIHHSQESKTYNILR NVKEKVGGKQPDKIWIDKTKLDKLTNISNEAQFSQMPPQVKDQKKLYLNRVGFKCTERESISLTKLESSPRKLHK DKRQENKHKTFLPVKGNTEKSNMLEFKLCPDILLKNTNSVEERKDVKPHPRKEQAPLQVSGIKSTKEDWLKFVAT KKRTQKDSQERDNVNSRLSKRSFSADGFEMLQNPVKDSKEMFQTYKQMYLEKRSRSLGSSPVK

2437/2825 FIGURE 2156

TCTGAAGCGAATCAGTGGGAAGTGGCCTACAGTGGGTCGGCTACCGAATACACCTTCACCCACTTGAAACCAGGC ACTTTGTACAAACTCCGAGCATGCTGCATCAGTACCGGCGGACACAGCCAGTGTTCTGAAAGTCTCCCTGTTCGC ACACTAAGCATTGCACCAGGTCAATGTCGACCACCGAGGGTTTTTGGGTAGACCAAAGCACAAAGAAGTCCACTTA GAGTGGGATGTTCCTGCATCGGAAAGTGGCTGTGAGGTCTCAGAGTACAGCGTGGAG**ATG**ACGGAGCCCGAAGAC GTAGCCTCGGAAGTGTACCATGGCCCAGAGCTGGAGTGCACCGTCGGCAACCTGCTTCCTGGAACCGTGTATCGC TTCCGGGTGAGGGCTCTGAATGATGGAGGGTATGGTCCCTATTCTGATGTCTCAGAAATTACCACTGCTGCAGGG GATAGTTCTGGTGCTGACATCTCAGAGTACAGGTTGGAATGGGGGAGAAGATGAAGAATCCTTAGAACTCATTTAT CATGGGACAGACACCCGTTTTGAAATAAGAGACCTGTTGCCTGCTGCACAGTATTGCTGTAGACTACAGGCCTTC AATCAAGCAGGGGCAGGGCCGTACAGTGAACTTGTCCTTTGCCAGACGCCAGCGTCTGCCCCTGACCCCGTCTCC ACTCTCTGTGTCCTGGAGGAGGAGCCCCTTGATGCCTACCCTGATTCACCTTCTGCGTGCCTTGTACTGAACTGG GAAGAGCCGTGCAATAACGGATCTGAAATCCTTGCTTACACCATTGATCTAGGAGACACTAGCATTACCGTGGGC AACACCACCATGCATGTTATGAAAGATCTCCTTCCAGAAACCACCTACCGGATCAGAATTCAGGCTATAAATGAA ATTGGAGCTGGACCATTTAGTCAGTTCATTAAAGCAAAAACTCGGCCATTACCACCCTTGCCTCCTAGGCTAGAA TGTGCTGCTGCTGGTCCTCAGAGCCTGAAGCTAAAATGGGGAGACAGTAACTCCAAGACACATGCTGCTGAGGAC ATTGTGTACACACTACAGCTGGAGGACAGAAACAAGAGGTTTATTTCAATCTACAGAGGACCCAGCCACACCTAC TTCTCAGAAACCTATACCTTCAGCACAACCAAAAGTGTCCCCCCCACCATCAAAGCACCTCGAGTAACACAGTTA GAAGGAAATTCATGTGAAATTTTATGGGAGACGGTACCATCAATGAAAGGTGACCCTGTTAACTACATTCTGCAG GTATTGGTTGGAAGAATCTGAGTACAAACAGGTGTACAAGGGAAGAAGCCACATTCCAAATCTCAGGCCTC CAGACCAACACAGACTACAGGTTCCGCGTATGTGCGTGTCGTCGTTTTAGACACCTCTCAGGAGCTAAGCGGA GCCTTCAGCCCCTCTGCGGCTTTTGTATTACAACGAAGTGAGGTCATGCTTACAGGGGGACATGGGGAGCTTAGAT GATCCCAAAATGAAGAGCATGATGCCTACTGATGAACAGTTTGCAGCCATCATTGTGCTTTGCCATTTTGCAACTTTG CTACACATTTTAATACACACATTTATTCAGATACTCCCCTTTTTAAAGCCCTTTTTGTTTTTTTGATTTATACTC TGTTTTACAGATTTAGCTAGAAAAAAAATGTCAGTGTTTTGGTGCACCTTTTTGAAATGCAAAACTAGGAAAAGG

2438/2825 FIGURE 2157

MTEPEDVASEVYHGPELECTVGNLLPGTVYRFRVRALNDGGYGPYSDVSEITTAAGPPGQCKAPCISCTPDGCVL VGWESPDSSGADISEYRLEWGEDEESLELIYHGTDTRFEIRDLLPAAQYCCRLQAFNQAGAGPYSELVLCQTPAS APDPVSTLCVLEEEPLDAYPDSPSACLVLNWEEPCNNGSEILAYTIDLGDTSITVGNTTMHVMKDLLPETTYRIR IQAINEIGAGPFSQFIKAKTRPLPPLPPRLECAAAGPQSLKLKWGDSNSKTHAAEDIVYTLQLEDRNKRFISIYR GPSHTYKVQRLTEFTCYSFRIQAASEAGEGPFSETYTFSTTKSVPPTIKAPRVTQLEGNSCEILWETVPSMKGDP VNYILQVLVGRESEYKQVYKGEEATFQISGLQTNTDYRFRVCACRRCLDTSQELSGAFSPSAAFVLQRSEVMLTG DMGSLDDPKMKSMMPTDEQFAAIIVLGFATLSILFAFILQYFLMK

2439/2825 FIGURE 2158

GTACAGAAGCAAAATCAAACCTGCTATTTCAGCACTCCTGTTTTTAACTTGGTGTCTTTAGTGCTTGGATTGGTG $\texttt{GGATGTTTCGGA} \underline{\textbf{ATG}} \texttt{GGCATTGTCGCCAATTTTCAGGAGTTAGCTGTGCCAGTGGTTCATGACGGGGGCGCTCTT}$ AGTCTCTCGACATGCCACATACGGATGGTCATCTCTGCCGTTTCTTGCGCAGCTGTCATCCCCATGATTGTCTGT ATCTGTGAATGGACAGTGGCCTTTGGTTTTATTTTCTACTTCCTAACTTTCATCCAAGATTTCCAGAGTGTCACC ${\tt CTAAGGATATCCACAGAAATCAATGGTGATATT} {\tt TGA} {\tt AGAAAGAAGTATCAGTCTCACTCAGTGAATGTCGCAGG}$ CCATTTCTAAAAGTGCTACAGAGGACAGACAGGGTTTTGAGGCCACCCTGATTATTGGGATGCATCTGCAGCACA TCCAGGACTTGAATTTCATTACGAGTTCCTAATAGTTGTATTTCTAAAGATGTGTTTCCTAGAGAATGTACAGCC TTATGACACTGTAGTGATGTTTTTATAATTTTCTAAGTAGATTTTTTTATATTAACAAATTCATATACAGAAAAA ATGGAAATACACTAAATGAGTAATTCAGGTTCAGTACATTTATTACAAAGTGAAATCAGGGGATATTCATTTGTA AATTTTATTCTTAGTGAATGAACTGTATAATTTTTTTTTATCAGGAGAGCACTTATAAAATTCAATTTATAAAGAT CATATACCCAAATCATAAAGATTTAGTTGATACATTAACACTAAGATACTCTGATTTTTTAGCGAACTAAACAAAG TGCTTCTACTGAGAGGCCTTTATACCACCATGTACAGTAACTCTAAGTGAATACGGAAGACCTTGGTTTTGAAAT TCTGCCACCTTGTTTCTCCCTGCTCATGAGGTCGCACCTTTTGCTCTTGCTGCTAATTGCCCATTCGTAGTGGGT GTAATGCCAGGTGGAATGGTTTCAACAAGTCAGGTGAAAACCATCCTTTATTGTTGCTGGCACAACTTGATATAT AGTCTGACTCAGAACTGAAGCTCACATCTCAAATTCATTTCATGCCAGTAAATGTGGCAAAGAGAAGAAAAGGCCC CTTCTCTTCATGCCTGTGGCTGGATGTCCCACAACACTATAAGAAATATAAGTCAAGCCCTTTGTGTTAAGCAAG AACTACAGACTCCATCTTTTCACCCAAATCATGAATGACCAATAAAAAGCAAGTTATTCCAGAGGAAGAAGCAGC CCTTGAAATGTTAAGGCTTAGGCTTGAAAGGTGAAGAGCAGGAATTCTCTCTTTCAAATCCTAGAGCATAAACCC ATGTGTGGCCAAGTGAGATCAGCCCTCAAGGGCACATGCCAAGGGCAGAGCAGCCCATGTAGACAGCTTCGGAGG GCATGGGGGTGTAGGGAGTTCGGGGTAGCTCCTCATTAACTATTTGTTGGGTGAGTAAAGGGGTGAGGCTCAGTG GCAGGTACCTCTGCAATGACAAGCTGCCTCCCCTCTATGTGTTTAGCATATGTTATTAGAACATGTCCGACACCC $\verb|CTACCGCTGCCATTTGGGCCCTTTAATAAAGCCAAGTAGAGAAATCTGGCAATAAAAGGCAAATGTAAGCATGCT| \\$ TTCTTTAAGACGCATCATAAATGGTTTTCTTTAAGTGAATGGAAGAGTTTGACAGAGATACACCTTTGTAAGAAA ACATTAAGAATGCTGGCTGTGGTGGCTCACACCTGTATTCCCAGCACTTTGGGAGGCCTAGGCAGGAGGAT TGCTTGAGCCTGGGACTTCGAGACCAGACTGGGAAACATGGCAAAAATCCCATCTCTACAACAAAAATACAAAAAT TAGCCAAGTGCGGTGGTGTCCTGTAGTCCTAGTTACTTGGGAGGCTGAGGTGGGAGAATCACCTGAGCCCAGGA AAATAAATAAATGAATAAAGAGAATGCTAATCATTTCTGGGTTCACTGCGACTCACTGTAGTGCTGGGGATCCCC CCACATACCTTTCCCATGGGACCTGTGGTGGAATGAATCCATACTTCTGCCTCACTTCGAGCAGACTTTTGTTCT $\tt CGGCGCTCCTCACGATGGAGTTTCATGCTTCATTTTCACATCTCTCTGCACAATTAGATTGGGAGCTCCTTGAGG$ GCAGAGTACGTGCCTTAATCTTTATCTTTGTAATGCCACAATGAACAGAGTGCCTCCTGGTACACTGTAGGAGCT TAAGAAATACTCACTGAATGCATGAATGAATGAATGAACAAATGAAGGAATGACTAAGGATGTTTGTAGTGCTAT AATATAGAATGGGATTTACTCTGCTTTACCAGTTAGTTTCATAATAAACAAATAGTCTGT

2440/2825 FIGURE 2159

MGIVANFQELAVPVVHDGGALLAFVCGVVYTLLQSIISYKSCPQWNSLSTCHIRMVISAVSCAAVIPMIVCASLI SITKLEWNPREKDYVYHVVSAICEWTVAFGFIFYFLTFIQDFQSVTLRISTEINGDI

2441/2825 FIGURE 2160

TGCGGCCTGCCTCAAGCAACCAGGTACGTAGGTCGGCGGCCCAGCTCGGCGCTGCGGTGGGAGCCGGAGGGCGAC AGTCAGAGCCGGGGTGCCAGCGGGACGCGACCGCCAGATCCACTTAGGACCCCGTCGTTCTGCGAAGCGGCCACG TCTGAGTCCCGGGGCCTCCTCGTGCTGCAGATGTCGCCTTAGGACCTCGGCCAGGATACCCTCTGCCATGCTCTT GTGCTGCCCGTGATCACCGACTGGCCCTTGTAAGCACCTTCGCAGCAGGAAGCCCAGAGCTGCGCCTGCCCTTTC TGAAGGCTGTGGAAGAGGTTGGAGTGGGCGCATCTTAGCTTGCCCCATCCCCATTTGAGGTCTGTCGGAGCTGCC CTTCAGTGTGAGCATCCACA**ATG**GGTACCCCAGCCTCGGTGGTCAGTGAGCCACCCCCTTGGCAGGCCCCGATTG AGGCCCGGGGCCGAAGCAGCCTCGGCCAACATCTTCCAGGACGCCGAGCTGCTGCAGATCCAAGGCCTGTTTC AACGCAGCGGGGACCAGCTGGCCGAGGAACGGGCACAGATCATCTGGGAATGTGCAGGGGACCACCGTGTGGCTG AGGCCCTCAAGAGGCTGCGCAGGAAGAGGCCCCCAAGGCAGAAACCCCTGGGCCACTCGCTACACCACTGCAGCC GCCTCAGAATCCTGGAGCCCCACTCTGCACTGGCCAACCCACAGAGTGCCACAGAGACAGCCTCCAGTGAGCAGT ATCTGCACTCTAGGAAGAAAGTGCCAGGATCCGCCGGAACTGGAGGAAGTCAGGCCCCACAAGCTACCTCCACC AGATCAGACACTGATCCAGGGAAAGAGCCAGGAATGGCAGTGTCTTCCCTCTTGCCAAAAGGCCTGGGGAGGTGA AGGAAGAGAGACTTTAGGCAAGCAGCCCAAAGGGGTAAATGAAAGCAAGAGGCTGCTGCCACTGACCTGCTCCAT TCAGAACAAGACTGGATGCTTCTGTTGAGCTCTCCATTATGTGGGACCCATTCCTCACCAAAATGAGGAGAGACA GTGACTGTTCCTGCCACAGTCCTTCCCAGTCTAACACTATTCCTGGGCTGCATGATATTCCCCTGGGAGCAAAGT GACAGGCACTTAGATGCAGCATTTCACCACTCATGCTACTAATCATCTACCTGCTACTACTGTAAACCATGGTTC CAGCAGCCTGTTCCACACCCCCACACCATCAGGATAGCACAGGGAAACTGTAGTTTAAGTGGCAAATAAAAACAT

2442/2825 FIGURE 2161

2443/2825 FIGURE 2162

TGCCAGCCCGGGGCCCAGAATCCTGCGCTGCGGGGCCGAGAGGGGGCCCGCCGCCGCCGCCGCCGCAGCCTTTC GGGCACGGCCGGCCCAAGGAGCTCAGCTTCGCCCGCATCAAGGCCGTGGAGTGCGTGGAGACCACCGGGCG CCACATCTACTTCACGCTGGTGACCGAAGGGGGCGGCGAGATCGACTTCCGCTGCCCCCTGGAAGATCCCGGCTG GAACGCCCAGATCACCCTAGGCCTGGTCAAGTTCAAGAACCAGCAGGCCATCCAGACAGTGCGGGCCCGGCAGAG $\verb|CCTCGGGACCGGGACCCTCGTGTCCTAA| CCACCGGGCGCACCATCTTTCCTTCATGCTACCCACCACCACCATCGTG| \\$ CTGAGGTCAAGGCAGCTTCGTTGTTCCCTCTGGCTTGTGGGGGGCACGGCTGTGCTCCATGTGGCAAGGTGGAAGG CATGGACGTGTGGAGGAGGCCTGGAGCTGAAGGAATGGACCAGCCCTGGGAGGAGGGCAGAAGGCTACGCAGGG AGACTGCTCTTAGCCCCTGGCTTTGTGCCAGGCCTGGAGAGGGCAGTCCCCCATGGGGTGCCGAGCCAACGCCT CAGGAATCAGGAGGCCAGCCTGGTACCAAAAGGAGTACCCAGGGCCTGGTACCCAGGCCCACTCCAGAATGGCCT $\tt TGGACTCACCTTGAAAGGGGGAGCTGCTGGGCCTAAAGCCCACTCCTGGGGGGTCTCCTGCTTAGGTCCTTTT$ GGGACCCCCACCCATCCAGGCCCTTTTTTGCACACTTTTCCCCCACCTTATGCATTTCCCCCCACTGCGGTGTTC GGCCTAAGGTGGTGGGGGGGGGGGTTTGGCCATTAGCATTTCATGTCTTTCCCCAAATGAAATGCCCTGCA AAGGGCAGTAACCCC

FIGURE 2163

 ${\tt MTAAATATVLKEGVLEKRSGGLLQLWKRKRCVLTERGLQLFEAKGTGGRPKELSFARIKAVECVESTGRHIYFTL} \\ {\tt VTEGGGEIDFRCPLEDPGWNAQITLGLVKFKNQQAIQTVRARQSLGTGTLVS}$

2445/2825 FIGURE 2164

GCTGCCGCATCCCAGGCTAAGCCGCCGCGCGAAAGCCGTGCGGAGATTGGAGGCCGCGCGGGTCCCTGGTCTGGG CCATGTCTGGCTGTGATGCTGGGGAGGGAGACTGTTGTTCCCGGAGATGCGGCGCGCAGGACAAGGAGCATCCAAGATACCTGATCCCAGAACTTTGCAAACAGTTTTACCATTTAGGCTGGGTCACTGGGACTGGAGGAGGAATTAGCT TGAAGCATGGCGATGAAATCTACATTGCTCCTTCAGGAGTGCAAAAGGAACGAATTCAGCCTGAAGACATGTTTG $\verb|TTTCATGAATGCTTACACAATGAGAGGAGCAGGTGCAGTGATTCATACCCACTCTAAAGCTGCTGTGATGGCCA|$ CACTTCTCTTTCCAGGACGGGAGTTTAAAATTACACATCAAGAGATAAAAAGGAATAAAAGAAATGTACTTCCG GAGGGTATTATAGATATGATGATATGTTAGTGGTACCCATTATTGAGAATACACCTGAGGAGAAGACCCTCAAAG ATAGAATGGCTCATGCAATGAATGAATACCCAGACTCCTGTGCAGTACTGGTCAGACGTCATGGAGTATATGTGT AGAAAGTAGGACTTGATCCTTCACAGCTCCCAGTTGGAGAAAATGGAATTGTC**TAA**GCCAAAAGAAAGTCTAATT ATATACAGAGATAAAGCTAAACGTAATTATTTATTTAAATGAAAGCTATTTTTTAAATGAATTGAAATTTTTCAT GATGCTACTAATTTGCCACTAAATACTGCAAATGGTCACCCTGAATCTCTTCTGACATTGGATGTTATTTGCTTA GCTGGTGATAATAAAATTCATTAGAAAATTTCCTCATTGTGGAATGAGCATTCTCTTGTTTTAATGTTGGTGTCA GAAAATAAATATGAAACATTAAGTCC

2446/2825 FIGURE 2165

MSGCDAGEGDCCSRRCGAQDKEHPRYLIPELCKQFYHLGWVTGTGGGISLKHGDEIYIAPSGVQKERIQPEDMFV CDINEKDISGPSPSKKLKKSQCTPLFMNAYTMRGAGAVIHTHSKAAVMATLLFPGREFKITHQEMIKGIKKCTSG GYYRYDDMLVVPIIENTPEEKTLKDRMAHAMNEYPDSCAVLVRRHGVYVWGETWEKAKTMCECYDYLFDIAVSMK KVGLDPSQLPVGENGIV

2447/2825 FIGURE 2166

 $\tt GCGGCCGCGGCCGTGAGCCTGCCCCCAACTCGCCCTCAGCCGGCTGGCCGGCGGCGCCATGGAGGTCTACATCCC$ AAAACATTTTGTTGAAAAGAGATACAGCGAATTTCATGCTTTGCACAAAAAGCTTAAGAAATGTATAAAAACTCC AGAAATCCCTTCTAAACATGTTAGGAACTGGGTCCCCAAAGTCTTGGAACAGCGACGACGACAAGGCTTGGAAACATA CTTACAGGCTGTCATTTTAGAAAATGAAGAACTTCCCAAACTGTTTCTTGATTTCCTAAATGTGCGACACTTGCC CTCTCTACCAAAGGCAGAAAGTTGTGGATCTTTTGATGAAACAGAGTCTGAAGAGTCAAGCAAACTGTCCCACCA AGTCCTCCATGGGATATTTTACCCTCATCTACAGCCCAGG**TAG**AAATCCTACATGGCTAAAAGAAGCAGAAGCAA GTTTCGAAGTCACAGTCAAGGAAATCAATACCTACCAATTTAACCTAAACGCTATGATATATAACAGCTCTAGCT AGTGGTAAAGTGCACAGTCCCAGCTTAATTCAGGGCAGGACATTTCCATTAGAATGGTGCTCTTAAAAATAGAA ACTGAACCGGGGCGGTGGTCAGGCCAAGGCCAAGTGTTTAAGAAGTAGAGTGTAGCTGCCAGCGTAGAAACCCAT GAAAAGGAGGCCACAGGAGATTCCTGGGAGCACTGGGTGTAGCAAAACAAAGCCACTCTCTGCTTCAGTCGCACC ATTTGCTAATTGAAAATCATATCCTGAATCATACTGAGACTGATCAACTTTGGTAGCTTTTTTGTTCAGATCTTA TGACACACTACTCTTCTCACCGTGAGATTTTCTCAGCCAGTGATAGTACATTCTGAAATGCTGGCACCAGGAGAC GGCCACAGACACACTGCTAAATGTGAAGATGGAACTAAACTGGAAATTAAATTATACTGACAATATTATGGCA TTTTTAAGATCATGGCATTTTAATTTACATTAGAGTGGAGTTGCATCATACTCAGGGGTTAGCTTCCAAGGTCAG TACATAGGTAAAATGGGCTATTAGGATGATCCTTGAAAGCCCTTTAGAAGGGTGCCATGTTGGAAACCTGTACAT TGTTTGTTTAGGGGCCATTTTGTTAAAAAAAAAAAACCACATAACTTTTAACACTAGAATCAGCCCGCAAGATGCT TTACTCAAGGGTGTGCATTCATTTTAGGTGGGATCGCCACAGGATTTCATGTTATTTTCCTTACGGCTTCCTTTT CACTGACCTCATTTGTTGAGTTAATGTAAGTTAAATGTGTCTATGATATAACTCCACTGTACATCATCCTTTGAG AGCTAGCCTATTTATGGTTATTCGTTTTAGTAAGTTCTGTGGGAGCAAGGTATTTAAAATCAAAACTAATAACTA CATCATGGTTTTTGATTAGGATCTAAATATTCAGGTTTTAAGCCTGCTGCAAACTTTTAAAATATTATGATAGAT TCTGTACTACATGTGGGAAACAAGCAAGAACTAAATAATCAAATGTTGTCAACCAAAAGTAATAGTTGGGTATTG ΑΑΑΑΑΑΑΑΑΑΑΑ

2448/2825 FIGURE 2167

MEVYIPSFRYEESDLERGYTVFKIEVLMNGRKHFVEKRYSEFHALHKKLKKCIKTPEIPSKHVRNWVPKVLEQRR QGLETYLQAVILENEELPKLFLDFLNVRHLPSLPKAESCGSFDETESEESSKLSHQPVLLFLRDPYVLPAASDFP NVVIEGVLHGIFYPHLQPR

2449/2825 FIGURE 2168

2450/2825 FIGURE 2169

 ${\tt MKPPAEDLSDALCEFDAVLADFASPFHERHFHYEEHLERMKRRSSASVSDSSGFSDSESADSLYRNSFSFSDEKL} \\ {\tt NSPTDSTPALLSATVTPQKAKLGDTKELEAFIADLDKTLASM}$

2451/2825 FIGURE 2170

AGAAGCAGTCAGCCCAGGGCTCTCGGATGCAGGGAGCCTGGGCCCAAACAGCAGCTTCCGGAGTCGGAAGGAGCT GGCGCTCTGCTACTGGTCCCGTTAAGCCAGAGTAGCCCAAGCCCTGAAGTCACTGCTCATCCGGAATGGAAATCC CGCCGACCAACTACCCAGCCTCCAGGGCGGCCTTGGTGGCACAGAACTACATCAACTACCAGCAGGGGACCCCGC ACAGGGTGTTTGAGGTGCAGAAGGTCAAACAAGCCAGCATGGAGGATATTCCAGGAAGAGGACATAAGTATCGCC TTAAATTTGCTGTTGAAGAAATTATACAAAAACAAGTTAAGGTGAACTGCACAGCTGAAGTACTTTACCCTTCAA CGGGACAAGAACTGCACCAGAAGTCAACTTCACATTTGAAGGAGAAACTGGAAAGAATCCAGATGAAGAAGACA ACACATTTTATCAAAGACTTAAGTCCATGAAGGAACCGCTAGAAGCACAAAATATTCCAGACAATTTTGGAAATG TATCTCCAGAAATGACGCTCGTTCTACATTTAGCCTGGGTTGCCTGTGGTTATATAATATGGCAAAATTCTACTG ACTACACCATTCTACTTCATAATATAGCATCTCAGGAGATTATTCCCTGGCAAATGCAAGTTCTCTGGCATCCAC AATACGGCACTAAAGTAAAACATAATAGCCGTCTGCCAAAGGAAGTACAACTGGAA**TAA**ACAAAAACCCTAACAC TGGAAGTGTAAACATGTCTATTGATGTGTATGCCAATTTCACTGGCATCTAGCTTATGAGGCCAAATAATCCCAA AGTGTCACTTTATATAAATGTCTTGATTACAGTATAGAACTTTATAGAGTCCATAATACAAAGTATCACTACATA AAAAAAAAAAAAAAAA

2452/2825 FIGURE 2171

2453/2825 FIGURE 2172

CAGTAGCCGCGGCTGCTTCGGTTGCCGCGGTCGGTCGTTATCGATTCTCCATGGGACGAGTTGGCTCTGGCC TTCTCCCGCACGTCCATGTTTCCCTTTTTTGACATCGCGCACTATCTAGTGTCAGTGATGGCGGTGAAACGTCAG CCGGGAGCAGCTGCATTGGCATGGAAGAATCCTATTTCAAGCTGGTTTACTGCTATGCTCCACTGTTTTGGTGGA GGAATTTTATCCTGTCTACTGCATGCAGAGCCTCCATTGAAGTTTCTTGCAAACCACACTAACATATTACTGGCA TCTTCAATCTGGTATATTACATTTTTTTGCCCGCATGACCTAGTTTCCCAGGGCTATTCATATCTACCTGTTCAA CTACTGGCTTCGGGAATGAAGGAAGTGACCAGAACTTGGAAAATAGTAGGTGGAGTCACACATGCTAATAGCTAT TACAAAAATGGCTGGATAGTCATGATAGCTATTGGATGGGCCCGAGGTGCAGGTGGTACCATTATAACGAATTTT GAGAGGTTGGTAAAAGGAGATTGGAAACCAGAAGGTGATGAATGGCTGAAGATGTCATACCCTGCCAAGGTAACC CTGCTGGGGTCAGTTATCTTCACATTCCAGCACACCCAGCATCTGGCAATATCAAAGCATAATCTTATGTTCCTT TATACCATCTTTATTGTGGCCACAAAGATAACCATGATGACTACACAGACTTCTACTATGACATTTGCTCCTTTT GAGGATACATTGAGTTGGATGCTATTTGGCTGGCAGCCGCTTTTCATCATGTGAGAAGAAAGTGAAGCAAAG TCACCTTCCAATGGCGTTGGGTCATTGGCCTCAAAGCCGGTAGATGTTGCCTCAGATAATGTTAAAAAGAAACAT ACTAAGAAGAATGAA<u>TAA</u>ATTTACGTGATGAGCTCTACAAGGCCAAAAATTTTTTTTCTTATCTACCTGTTATAT TTCTTTGTTTGAGGGAGACTTCCCCTTTCTGGATTGTATTTGTAGAGTGTTACGAGTGTATCATGTGATTATGCT GTTAGAAAAAGCAGATCTGTCATTGCAAAGTAACAAAAATTTTAAGCTTTTAAAAATGTAGATTTTTCATATTTT TAAAATTTGAATCTATTTGAGCTTTAGTTCAGCAGAATTAAATTTTTACTTGACATTATCATTAAAATTGCTAGG TATGGAGAACAATTCCTATTTTATTTTGAACACTGAGAAGAGTAAACTTTTCCTAAAACACTTTATATTATAAAT GAAAATAAATTGCTAGTTTATATTTTAGATATAAACATCATATTTTTTATTAATACCTACATCAAATGGAAAATA TCTGAAATTTTTTTCCATAGCAGGTATTTTCTACTAGAAGTAGTTTTACTACTTTTCATTTAGAACAGAGTATG TGAATATATTGGTAGTAATTACTGTAATTATTCAACAAAAAGCATATCCGTTCAAAAATTTTTCCACTATGTCTT TTTTCTAGTGGCTACTGTTTTAGTTTTCTAGTTGAATATCTCTGACAAGCTTTCGTATGGTTTTGTTATATCTTC ATCTACATGTAATGTGTTATTAATTTTAATGAAAACTAATCACCTTC

2454/2825 FIGURE 2173

 $\label{thm:lassiwy:tffc:equal} MDSPWDELALAFSRTSMFPFFD:IAHYLVSVMAVKRQPGAAALAWKNP:SSWFTAMLHCFGGG:USCLLLAEPPLK FLANHTNILLASSIWY:TFFCPHDLVSQGYSYLPVQLLASGMKEVTRTWK:VGGVTHANSYYKNGWIVMIA:IGWA RGAGGT:ITNFERLVKGDWKPEGDEWLKMSYPAKVTLLGSV:IFTFQHTQHLA:SKHNLMFLYT:IFIVATK:ITMMT TQTSTMTFAPFEDTLSWMLFGWQQPFSSCEKKSEAKSPSNGVGSLASKPVDVASDNVKKKHTKKNE$

2455/2825 FIGURE 2174

GCTGCAGTTCCAGGCGAGCGCGGGGGACTCGGACCCACAGAGCCGGCCCCTGCTGCTGCTCCGGGCAGCTGCACCA $\verb|CCTGCACCGCGTGCCCTGGAGCCACGTCCGCGGGAAGCTGCAGCCCCGGGTCACCGAGGAGCTCTGGCAGGCTGC| \\$ $\tt CCTGAGCACGCTCAACCCCAACCCCACGGACAGCTGTCCCCTCTACCTGAACTACGCCACCGTGGCTGCCCTGCC$ CTTCCCGCTGTTCACCCACCGCTCAGGTGCCTCTCGGCGCTTGGAGAAGAAGACGGTCACCGTGGAGTTTTTCCT GGTGGGACAAGACAACGGCCGGTGGAGGTGTCCACATTGCAGTGCTTAGCGAATGCCACAGACGGCGTGCGGCT AGCAGCCCGCATCGTGGACACCCTGCAATGAGATGAACACCGACACCTTCCTCGAGGAGATTAACAAAGTTGG AAAGGAGCTGGGGATCATCCCAACCATCATCCGGGATGAGGAACTGAAGACGAGAGGATTTGGAGGAATCTATGG GGTTGGCAAAGCCGCCCTGCATCCCCCAGCCCTGGCCGTCCTCAGCCACACCCCAGATGGAGCCACGCAGACCAT CGCCTGGGTGGGCAAAGGCATCGTCTATGACACTGGAGGCCTCAGCATCAAAGGGAAGACTACCATGCCGGGGAT GAAGCGAGACTGCGGGGGTGCTGCGGCCGTCCTGGGGGCCTTCAGAGCCGCAATCAAGCAGGGTTTCAAAGACAA CCTCCACGCTGTGTTCTGCTTGGCTGAGAACTCGGTGGGGCCCAATGCGACAAGGCCAGATGACATCCACCTGCT GTACTCAGGGAAGACGGTGGAAATCAACAACACGGATGCCGAGGGCAGGCTGGTGCTGGCAGATGGCGTGTCCTA TGCTTGCAAGGACCTGGGGGCCGACATCATCCTGGACATGGCCACCCTGACCGGGGCTCAGGGCATTGCCACAGG GAAGTACCACGCCGCGGTGCTCACCAACAGCGCTGAGTGGGAGGCCGCCTGTGTGAAGGCGGGCAGGAAGTGTGG GGACCTGGTGCACCCGCTGGTCTACTGCCCCGAGCTGCACTTCAGCGAGTTCACCTCAGCTGTGGCGGACATGAA GAACTCAGTGGCGGACCGAGACAACAGCCCCAGCTCCTGTGCTGGCCTCTTCATCGCCTCACACATCGGCTTCGA GGCCCTCCTGCTGGCGCTCTTCGGCCGTGCCTCTGAGGACCCTCTGCTGAACCTGGTGTCCCCACTGGGCTGTGA GGTGGATGTCGAGGAGGGGGACCTGGGGAGGGACTCCAAGAGACGCAGGCTTGTG**TGA**GCCTCCTGCCTCGGCCC TGACAAACGGGGATCTTTTACCTCACTTTGCACTGATTAATTTTTAAGCAATTGAAAGATTGCCCTTCATATGGGT TTTGGTTTGTCTTTCTGGTCGTCAGCGTGGTGGTGGAAACAGCTGAAGTTTTAGGAGACAGCTTAGGGTTTGGTG CCCAGCCTGTGAAAGATGGAGCTGACTTGCTGCAGGGGACCTGATTTATAGGGCAAGAGAAGTCACACTCCGGC AAAAAAA

2456/2825 FIGURE 2175

MVCEQPEVFASACALARAFPLFTHRSGASRRLEKKTVTVEFFLVGQDNGPVEVSTLQCLANATDGVRLAARIVDT PCNEMNTDTFLEEINKVGKELGIIPTIIRDEELKTRGFGGIYGVGKAALHPPALAVLSHTPDGATQTIAWVGKGI VYDTGGLSIKGKTTMPGMKRDCGGAAAVLGAFRAAIKQGFKDNLHAVFCLAENSVGPNATRPDDIHLLYSGKTVE INNTDAEGRLVLADGVSYACKDLGADIILDMATLTGAQGIATGKYHAAVLTNSAEWEAACVKAGRKCGDLVHPLV YCPELHFSEFTSAVADMKNSVADRDNSPSSCAGLFIASHIGFDWPGVWVHLDIAAPVHAGERATGFGVALLLALF GRASEDPLLNLVSPLGCEVDVEEGDLGRDSKRRRLV

2457/2825 FIGURE 2176

TACTTGCGTCATGGACAGCTCATTGTAAATGATGGCATTAATTTATTGGGTGTGTTAGAAGAAGCAAGATTTTTT GGTATTGACTCATTGATTGAACACCTAGAAGTGGCAATAAAGAATTCTCAACCACCGGAGGATCATTCACCAATA AGTGGTGCTGATCTTTCTCGTTTGGACCTTCGATACATTAACTTCAAAATGGCCAATTTAAGCCGCTGTAATCTT GCACATGCAAATCTTTGCTGTGCAAATCTTGAACGAGCTGATCTCTCTGGATCAGTGCTTGACTGTGCGAATCTC CAGGGAGTCAAGATGCTCTGTTCTAATGCAGAAGGAGCATCCCTGAAACTGTGTAATTTTGAGGATCCTTCTGGT AGAGTGGCTACCTTAAAAAATGCAAAGTTGAAGAACTGTAACCTCAGAGGAGCAACTCTGGCAGGAACTGATTTA GAGAATTGTGATCTGTGTGTGTGATCTTCAAGAAGCCAACCTGAGAGGGTCCAACGTGAAGGGAGCTATATTT ${\tt GAAGAGATGCTGACACCACTACACATGTCACAAAGTGTCAGA} {\tt TGA} {\tt GAATTTTAGGGGCTGGAGGAAGATGTAAAA}$ TTTAAAAAAAAACATTTAGAGGATTATGCTTGTTTTGAGTGGTGCATAAGGGAAAAAACTGACTTTTTTTCCAT ATTCTGATTTTTAACAGAAAAGCACTCATTTAATAGATGTAGGGAAACTAGATATTGCTGCCTTTTGAATGGGGT AGGGGGGTTTACCTGGTTTTATGACCAGGCATAGTATCTATTATATTTGCTTTTAAATAGGCATGATGTGGAAAT TCCTAGATGCAGTATGGATATTTAAATTGTTAAAACTTTATGAAAACTTTGGAAAAGGTTGTTCAGGTTTATAAAT AGCTTTAGTGATGCCTCCCTCTTTAAATACCTGTCACACCGTATGAATATGGTGAGATCAGACTCCCTAAGACT CTTTTCAGGTTCATTTTTATAATGTTTACTTTTTAGGACAGAACAGTAGCTAAATTAAAGTAATATCCAGTTCTT ACTGATTGAGACAGAGTGGAAAGAAAGACATCATTGTACATCACTGTCATTCCAAAGGTACAGTGTAACTCTGGA TGGAGGAATAACTTACCTATCACTACAACACTTACAAATGAGAATTTCTCAGAATTTCATTCTAGGCAAGTTCCA CTCAACACCAGATCAAGCAATTCTATCTATTTACACTATTAGCCTAGTTTTCTCATACAGTCATCACAAGCATAG GAAGATACTTCAAAACCAAAAAAACCAAGGTGCATCATTAATATTCATTTAATTCAAATGCCAAATAGTTTACAT AGGGCCAGCTTAGAAATAGATACTAAATCCAGAGCTACTGCAATCAAAGCTTATATGAGTGAATATGGTAGAGTT GCCTGCTAAAAGGCAATGTAATATAATTGCAGCTAGAACCCTACAGTGGGGAATGAGGAATTTTAAACACACATT AAGAGCAGGGATATTAGCTGTGTCCAAATGGGTTCTGAATTCTACAGACTCATCAACATGAGGCAAGGAATCATT GAAAACCACCTGTGTCTCCTTTGGGAGAATGACATATCTTTAGTATTTACGTAGCTTATTCTTCTATATCTACAT ATGCAAAGCTTTCCTTAACAGTAAAGGGTACATATGCATAGTGGGAGGAGATCAGACCTTTACAAGTGAAGGAAA GCAACTTCAGAAATGAATTATTTTCTTTGCTTTATTATTTTTTACCAAGACAGAAGTATTGTATTGAGAGATAA TCTATTTCATAATCAATATGTGCCTAAATTATATTTAAATCATTTCACTCTGTACTATATTTTCAGGAATTACA GAATGTGGTATTCACTTAAAGGTACCTCTGTAGAAATAACCTAAAACTGCAGAAGGATCTGAAAGATCTAA AAAAAAAAAAAAAAA

2458/2825 FIGURE 2177

 ${\tt MANLSRCNLAHANLCCANLERADLSGSVLDCANLQGVKMLCSNAEGASLKLCNFEDPSGLKANLEGANLKGVDME} \\ {\tt GSQMTGINLRVATLKNAKLKNCNLRGATLAGTDLENCDLSGCDLQEANLRGSNVKGAIFEEMLTPLHMSQSVR} \\$

2459/2825 FIGURE 2178

GGCACGAGGCCGAGCCTAGTGCCTCCCACGCCCGGCGGCCGAGCCGGGGTCCGCGAGGGCGGAGTGGGGCGCG GCACGGGGCGGGGACCGCCAAGGCGGGACCATTTCCCGGCATAGGCTCCGGTGCCCTGCCCGGCTCCCGCCGG $\tt CCTCCTCCTGTAACATGCCATAGTGCGCCTGCGACCACACGGCCGGGGCGCTAGCGTTCGCCTTCAGCCACCAT$ **G**GGGAATGGGATGAACAAGATCCTGCCCGGCCTGTACATCGGCAACTTCAAAGATGCCAGAGACGCGGAACAATT GTGCCGGCTCCGCGGTGAGAGCTGCCTTGTACACTGCCTGGCCGGGGTCTCCAGGAGCGTGACACTGGTGATCGC CCCCAACGTGGGCTTCCAGAGACAGCTCCAGGAGTTTGAGAAGCATGAGGTCCATCAGTATCGGCAGTGGCTGAA GGAAGAATATGGAGAGCCCTTTGCAGGATGCAGAAGAAGCCCAAAAACATTCTGGCCGCTCCAGGAATTCTGAA GTTCTGGGCCTTTCTCAGAAGACTG<u>TAA</u>TGTACCTGAAGTTTCTGAAATATTGCAAACCCACAGAGTTTAGGCTG GTGCTGCCAAAAAGAAAAGCAACATAGAGTTTAAGTATCCAGTAGTGATTTGTAAACTTGTTTTTCATTTGAAGC TGAATATATACGTAGTCATGTTTATGTTGAGAACTAAGGATATTCTTTAGCAAGAGAAAATATTTTCCCCTTATC $\tt CCCACTGCTGTGGAGGTTTCTGTACCTCGCTTGGATGCCTGTAAGGATCCCGGGAGCCTTGCCGCACTGCCTTGT$ GGGTGGCTTGGCGCTCGTGATTGCTTCCTGTGAACGCCTCCCAAGGACGAGCCCAGTGTAGTTGTGTGGCGTGAA $\tt CTCTGCCGTGTGTTCTCAAATTCCCCAGCTTGGGAAATAGCCCTTGGTGTGGGGTTTTATCTCTGGTTTGTGTTC$ AAAAAAAAAAAAAAAA

2460/2825 FIGURE 2179

 $\label{thm:mongmnkilpglyignfkdardaeqlsknkvthilsvhdsarpmlegvkylcipaadspsqnltrhfkesikfih\\ ECRLRGESCLVHCLAGVSRSVTLVIAYIMTVTDFGWEDALHTVRAGRSCANPNVGFQRQLQEFEKHEVHQYRQWL\\ KEEYGESPLQDAEEAKNILAAPGILKFWAFLRRL$

2461/2825 FIGURE 2180

GTGTTGCCGAGATTGCCAAAATGCTTTGGAGTTTTTAACTGAATCTAAGAAAAGTCCAAAATAGATTTGAGACTG ${\tt TAAAAACAGAAACTGCAGCAAGGGGGGATTCAGTGCCA} {\tt ATG} {\tt CATCAACAAAAAAGACAACCAGAGTTAGTGGAAGG}$ AAATCTTCCTGTTTTCGTGTTCCCCACGGAGCTCATATTTTATGCAGATGATCAGCCAACACATAAGCAAGTGTT GACACTGTACAATCCCTATGAGTTTGCCTTAAAGTTCAAAGTTTTGTGTACTACTCCAAATAAGTATGTTGTCGT TGATGCTGCAGGTGCAGTAAAGCCTCAGTGTTGTGTGGATATTGTGATTCGTCATCGAGATGTTCGATCCTGTCA TGTTGCTACTCTTCTCCCATCAGCAAAAGAACAACAAAAGGAAGAAGAAGAAAAAAGAATTAAAGGAACATTTAAC TGAAAGTTTATTTTTGAGCAGTCGTTTCAACCAGAAAACAGAGCTGTATCCTCAGGACCTAGTTTACTAACTGT CCTCCACTTAAGTGTGAATCAAAAATTAGTGGCTGCTTATATCTTAGGTCTTATCACAATGGCCATACTTAGAAC ATTTGAAGAAATTCTTTTATATCTATACCTGTTGTGTAAGAAACTTTAAAACATTTGTTATTTTCTCACCTTTT TTTCTAATTCACTTTGATTGCTAGGGGTCATGTATGCTTCGAAGTTACAGGACTAAAAGAGCAAACTGACCGGCC TAAAACTAAAATGACATTTATTCCCTAGCTACAAACATCAGCGTTATTATGTTAATTATACCTTGCCCTCTATCA CTTTGGTCTAAGAGTTCTAAAGGAAGGTAGGCATCTGTTTAATTAGTTGGTTCACCCTGGCTTTACCTCTGGTTA TGGGATTACCAGATACCAGGTGATTTATGTGGAGATGATTTTTCACCTTTAAACTCTAAGCCAAGTGTAAGAAAC TGCCAAAAAAGTCCCCTAAGCACAACTATTTACATTTCTTTATAGCCTCTTCTGATCTCTAACACATATGCAGTT TTAACTGTTATTTCATAGTAACTGATCTTTTGTCTAAGGATTTTTACCTGAAAGCACAATGTATTGAGTCTCTT GAAAATCATCTTTCAGATCTTTTTACAGAATGAACTTATGCACTGCTACTGTAGTATTCTCAAGGAATATATGTA AACACAAATGTATGCCTGAGGTTTGGTTTTTGCAGAAAACAGTCTCTGCTTCTAAAAACTTCTATGTCTAGTCTTC CATAGGAAATCCTCACTGTTTAACCATGTGAGGAGCCTAAGTCATTAAACGGATCATGTCTGTACATTGTGTAAT GAATGAAAAGCACATAAATGTAATCTACTTTGAACTTTGTAAAAATGATGTGTGGAGGCTATTCTTGTTTCTCCA TACTTTAAAAAATAAACAGAAATGGAGACCTGA

2462/2825 FIGURE 2181

 $\label{thm:construction} $$ MHQQKRQPELVEGNLPVFVFPTELIFYADDQSTHKQVLTLYNPYEFALKFKVLCTTPNKYVVVDAAGAVKPQCCV $$ DIVIRHRDVRSCHYGVIDKFRLQVSEQSQRKALGRKEVVATLLPSAKEQQKEEEEKRLKEHLTESLFFEQSFQPE $$ NRAVSSGPSLLTVFLGVVCIAALMLPTLGDVESLVPLYLHLSVNQKLVAAYILGLITMAILRT$

2463/2825 FIGURE 2182

2464/2825 FIGURE 2183

 ${\tt MQFNFELSFKYVLYSSYSWLKLDHTIADCMVFTWTPCRMLDYLYSSYANMLWAGEMKSSSHQDLLFKWLDNWATKELELHLLGFELFWNTLLHFGKSKSSASGALSIENLPSFALKDVLFFIYT}$

2465/2825 FIGURE 2184

GAAGCCAGTGCGGGGCCTGAGAGGGACGCGCCCCGGGGCCCCCGCGGGCACCATGGGCGCTGCCCACTCC GCGTCTGAGGAGGTGCGGGAGCTCGAGGGCAAGACCGGCTTCTCATCGGATCAGATCGAGCAGCTCCATCGGAGA TTTAAGCAGCTGAGTGGAGATCAGCCTACCATTCGCAAGGAGAACTTCAACAATGTCCCGGACCTGGAGCTCAAC $\verb|CCCATCCGATCCAAAATTGTTCGTGCCTTCTTCGACAACAGGAACCTGCGCAAGGGACCCAGTGGCCTGGTGAT| \\$ GAGATCAATTTCGAGGACTTCCTGACCATCATGTCCTACTTCCGGCCCATCGACACCACCATGGACGAGGAACAG GTGGAGCTGTCCCGGAAGGAGAAGCTGAGATTTCTGTTCCACATGTACGACTCGGACAGCGACGGCCGCATCACT $\verb|CTGGAAGAATATCGAAATGTAAAGTGGTCGAGGAGCTGCTGTCGGGAAACCCTCACATCTAGAAGGAGTCCGCTC|\\$ GCTCCATCGCCGACGGGCCCATGATGGAGGCGGCCAGCGTGTGCATGGGGCAGATGGAGCCTGATCAGGTGTACG AGGGGATCACCTTCGAGGACTTCCTGAAGATCTGGCAGGGGATCGACATTGAGACCAAGATGCACGTCCGCTTCC $\verb|TTAACATGGAAACCATGGCCCTCTGCCACTGACCCACCGCCACCTCCGCGGAGAGACTGCACTTTGCAATGGGGC|$ CGCCTCCCCGCGTAGCTGGAGCAGCCCAGGCCCGGCGGACAGCCTCTTCCTGCAGCGCCGGTACATAGCCAAGGC

2466/2825 FIGURE 2185

 $\label{thm:control} {\tt MRPRSGPTRNPRLRAFAGVPTRGRTRGQSRRCAAEASAGPERDARPGAPAAGTMGAAHSASEEVRELEGKTGFSS$$ {\tt DQIEQLHRRFKQLSGDQPTIRKENFNNVPDLELNPIRSKIVRAFFDNRNLRKGPSGLADEINFEDFLTIMSYFRPIDTTMDEEQVELSRKEKLRFLFHMYDSDSDGRITLEEYRNVKWSRSCCRETLTSRRSPLAPSPTGP$$$

2467/2825 FIGURE 2186

AAACCCAAAGCGGCCGCCGTAGGCGAAGGTGAAG ATC GCTGCCTCTGCCTTTGCTGGTGCAGTGAGAGCAGCTTCAGGAATCCTACGGCCCCTGAATATTTTGGCATCTTCAACCTACCGCAACTGTGTCAAGAATGCCTCTCTTATTTC TGCATTGTCCACTGGACGTTTTAGTCATATTCAGACACCAGTTGTTTCCTCCACTCCCAGACTTACCACATCTGA GAGAAACCTGACATGTGGGCATACCTCAGTGATCCTTAATAGAATGGCCCCCGTGCTTCCAAGTGTCCTGAAGCT GCCAGTCAGATCTCTAACATACTTCAGTGCAAGAAAAGGCAAGAGAAAGACCGTGAAAGCTGTCATCGATAGGTT TCTTCGACTTCATTGTGGCCTTTGGG**TGA**GGAGAAAGGCTGGCTATAAGAAAAAATTATGGAAAAAAGACACCTGC AAGGAAGAGCGATTGAGGGAATTTGTATTCTGCAATAAAACCCAGAGTAAACTCTTAGATAAAATGACGACGTC CTTCTGGAAGAGCCGAAACTGGTACGTTGATGATCCTTATCAGAAGTATCATGATCGAACAAACCTGAAAGTATA GATCAGAAGTTTCACTTGTTTCTCAGTTATTGGATATGTATCTTTGTGTACATATCTTTGCAAAAATGGATAAGT ACAAAACTTGATGTAAATTGTACCAATGAATACGTAAACATACAGTGACAACATTAAACTTAGAAAAGTTTTAAA ACTTAATGGATCAGACTTTGCCAGATTTGGTTAGGGAAACAGAAATTTAGAATGGTGCATTATTTTTAACAAATG GTATTGGCTTAACTAGTTGTTTCAGTTATGCTCTTTTAGTTGCAAGGAATCTCAAGTGGGACAAACATAAAAAGA $\tt CTCAAAAGCTACAAGTTAGCTCAAGCAATGTGACATTATTTCAAGGATATGTGCCAGGGAATTCAGGAACCACCT$ CACCAACCCCATCTCCCACTCAGAAATCACCTCCCAGCCTCAGGAAGAGTAGAAATTGGGTGGTGCTCCTCAGCA GGGGAAGGTGGATGTTTAGGCTTGGGCTCTGCATGCATGTGACTTGCTTCTTTTTGCATTGTTAACTCCATTCTC TCTATTCACCAACTTCTCTACACAGCTTTTGCATACTTACAGTTTCTGTTCCTTTGTAATAACTTTAACTTGCAC CTTTGAGGTTCTTTTCTACATGATGACCTTCAGCTCCTGCTGCTAGTCTCCAATTGCCAAGGGAATTTAACTGGG CCAGACTACCTTTTATACTAGGTCTGGTTGGGTCATTGTCTAGAGTAGGGATTGGCTGTCCTTAAGTCAGGAGC CCGCTTTGTATTAGCAGGTTTGCATGCAGCAAAAAAACAGTTATGTGAGCAGTTTCACTTGGAGGTTCACATGGG GTGGCAGCACACTTAACATCTAACACCAGGTTCATTGTGTTCATAACACTTGTCATTTACTGTAACAACATTT CTTTTTATGCAAGTTTTGAAAGATAGGTATTTATTTTTTCTAGAGACAGGAGTTTTGCTCTGTTGCCCAGGCTGG AGTGCAGTGGTGCAATCATAGCTCATTGAAGCCTCGCACTCCTGGGCTCAAGTGGTCCTCCTGCCTCAGCTTACT GAGTAAGGATATGTATTCTTAAAAGTTAGTTTATCCACTTCAGATTTCATGTTTTCATTTGTAAGGATAAACTT TTCCCACAAATTTTCAACAATCATTGTAGAAACTAAGGGGGGAGAAAGTAATCTCAGTTGTTTTAGAAACGAAAAA GTTAAGCATTGTTTACTTGAAGTGGGCAGGGAAGCAGCACTGAGTAAAGTTCAATTGAGTGGTTACAGTCTAGGG CAGTGGTTCCCAACTCTCCGATCAGAATCATCTGGGAAGCATTTTCAAACAGCAAAGTACTTTGAAAACCATTAT TAAATAGAATTATGCATGAATTACTGTTTCAGATCCTTTAATGTGGTAGTTGGTAATAATAAGATGAAATTCCTC TGTTGTTAGTAAAATTATGAAATTGAAGTTCTGCAGCATGTCAGGCCAGGATTATTAGGGAGATTCCTCGAAACT AGTGTGTGTTTATTAAAAGGAGAAAGGATAACAATAGAATGTTCTAAAACCAGAAGTCCAAGTGCGTGTCTACTT ATGGGACCAATAAATAAAGAACAGACATTTGATTTGAGGTGAGGTAAAAGCCTGAAACATGGAATGGCATTCTGT TTTGATGGATTTTCATTTCTTCGCACTTCTGAGACGCCAAAGCCAACCACTTAGAAGCCTTCCACATCTTTGTCA GATACTTTTGCACAGCCTCCATGATGTCTTTATTGCAAATATGGATGACAAGGGTCTCTGTTACAGGGGCCTCAG AGCACCTTCGTTTCTCCTCTAGACCAGGGACAGGTGTAGAGATAAGGACTGGCAACCAGAGCCTCAGCATCCAAA GTGGGTAGGAGGGCTTATCATCAACACTGATTTTATAATCTGACAATAAATGTCTTTCATTAAAGAGTTTACCTA AATGAAAAAAAAAAAAAAAAAAAAAAAAA

2468/2825 FIGURE 2187

 ${\tt MAASAFAGAVRAASGILRPLNILASSTYRNCVKNASLISALSTGRFSHIQTPVVSSTPRLTTSERNLTCGHTSVILLNRMAPVLPSVLKLPVRSLTYFSARKGKRKTVKAVIDRFLRLHCGLG$

2469/2825 FIGURE 2188

TAGTTATTAAAGTTCCTATGCAGCTCCGCCTCCGTCCGGCCTCATTTCCTCAAAAAATCCCTGCTTTCCCCGCTC GGCCGGCATGACCACCGAGCAGCGACGCAGCCTGCAAGCCTTCCAGGATTATATCCGGAAGACCCTGGACCCTAC CTACATCCTGAGCTACATGGCCCCCTGGTTTAGGGAGGAAGAGGTGCAGTATATTCAGGCTGAGAAAAACAACAA GGGCCCAATGGAGGCTGCCACACTTTTTCTCAAGTTCCTGTTGGAGCTCCAGGAGGAAGGCTGGTTCCGTGGCTT TTTGGATGCCCTAGACCATGCAGGTTATTCTGGACTTTATGAAGCCATTGAAAGTTGGGATTTCAAAAAAATTGA AAAGTTGGAGGAGTATAGATTACTTTTAAAACGTTTACAACCAGAATTTAAAACCAGAATTATCCCAACCGATAT CATTTCTGATCTGTCTGAATGTTTAATTAATCAGGAATGTGAAGAAATTCTACAGATTTGCTCTACTAAGGGGAT GATGGCAGGTGCAGAGAAATTGGTGGAATGCCTTCTCAGATCAGACAAGGAAAACTGGCCCAAAACTTTGAAACT TGCTTTGGAGAAAGAAGGAACAAGTTCAGTGAACTGTGGATTGTAGAGAAAGGTATAAAAGATGTTGAAACAGA AGATCTTGAGGATAAGATGGAAACTTCTGACATACAGATTTTCTACCAAGAAGATCCAGAATGCCAGAATCTTAG TGAGAATTCATGTCCACCTTCAGAAGTGTCTGATACAAACTTGTACAGCCCATTTAAACCAAGAAATTACCAATT AGAGCTTGCTTTGCCTGCTATGAAAGGAAAAAACACAATAATATGTGCTCCTACAGGTTGTGGAAAAACCTTTGT TTCACTGCTTATATGTGAACATCATCTTAAAAAATTCCCACAAGGACAAAAGGGGAAAGTTGTCTTTTTTGCGAA TCAGATCCCAGTGTATGAACAGCAGAAATCTGTATTCTCAAAATACTTTGAAAGACATGGGTATAGAGTTACAGG CATTTCTGGAGCAACAGCTGAGAATGTCCCAGTGGAACAGATTGTTGAGAACAATGACATCATCATTTTAACTCC ACAGATTCTTGTGAACAACCTTAAAAAGGGAACGATTCCATCACTATCCATCTTTACTTTGATGATATTTGATGA ATGCCACAACACTAGTAAACAACACCCGTACAATATGATCATGTTTAATTATCTAGATCAGAAACTTGGAGGATC TTCAGGCCCACTGCCCCAGGTCATTGGGCTGACTGCCTCGGTTGGTGTTGGGGATGCCAAAAACACAGATGAAGC CTTGGATTATATCTGCAAGCTGTGTGCTTCTCTTGATGCGTCAGTGATAGCAACAGTCAAACACAATCTGGAGGA ACTGGAGCAAGTTGTTTATAAGCCCCAGAAGTTTTTCAGGAAAGTGGAATCACGGATTAGCGACAAATTTAAATA CATCATAGCTCAGCTGATGAGGGGACACAGAGAGTCTGGCAAAGAGAATCTGCAAAGACCTCGAAAACTTATCTCA CCAGATGCCAGACAAAGATGAAGAGAGCAGGATTTGTAAAGCCCTGTTTTTATACACTTCACATTTGCGGAAATA TAATGATGCCCTCATTATCAGTGAGCATGCACGAATGAAAGATGCTCTGGATTACTTGAAAGACTTCTTCAGCAA TGTCCGAGCAGCAGGATTCGAAGAGATTGAGCAAGATCTTACTCAGAGATTTTGAAGAAAAGCTGCAGGAACTAGA AAGTGTTTCCAGGGATCCCAGCAATGAGAATCCTAAACTTGAAGACCTCTGCTTCATCTTACAAGAAGAGTACCA CTTAAACCCAGAGACAATAACAATTCTCTTTGTGAAAACCAGAGCACTTGTGGACGCTTTAAAAAATTGGATTGA AGGAAATCCTAAACTCAGTTTTCTAAAACCTGGCATATTGACTGGACGTGGCAAAACAAATCAGAACACAGGAAT GACCCTCCCGGCACAGAAGTGTATATTGGATGCATTCAAAGCCAGTGGAGATCACAATATTCTGATTGCCACCTC AGTTGCTGATGAAGGCATTGACATTGCACAGTGCAATCTTGTCATCCTTTATGAGTATGTGGGCAATGTCATCAA AGCAGTATTTAGGGAAAAGATTCTGCATATACAGACTCATGAAAAATTCATCAGAGATAGTCAAGAAAAACCAAA ACCTGTCCCTGATAAGGAAAATAAAAAACTGCTCTGCAGAAAGTGCAAAGCCTTGGCATGTTACACAGCTGACGT AAGAGTGATAGAGGAATGCCATTACACTGTGCTTGGAGATGCTTTTAAGGAATGCTTTGTGAGTAGACCACATCC CAAGCCAAAGCAGTTTTCAAGTTTTGAAAAAAGAGCAAAGATATTCTGTGCCCGACAGAACTGCAGCCATGACTG GGGAATCCATGTGAAGTACAAGACATTTGAGATTCCAGTTATAAAAATTGAAAGTTTTGTGGTGGAGGATATTGC AACTGGAGTTCAGACACTGTACTCGAAGTGGAAGGACTTTCATTTTGAGAAGATACCATTTGATCCAGCAGAAAT

2470/2825 FIGURE 2189

MTTEQRRSLQAFQDYIRKTLDFTYILSYMAPWFREEEVQYIQAEKNNKGPMEAATLFLKFLLELQEEGWFRGFLD ALDHAGYSGLYEAIESWDFKKIEKLEEYRLLLKRLQPEFKTRIIPTDIISDLSECLINQECEEILQICSTKGMMA GAEKLVECLLRSDKENWPKTLKLALEKERNKFSELWIVEKGIKDVETEDLEDKMETSDIQIFYQEDPECQNLSEN SCPPSEVSDTNLYSPFKPRNYQLELALPAMKGKNTIICAPTGCGKTFVSLLICEHHLKKFPQGQKGKVVFFANQI PVYEQQKSVFSKYFERHGYRVTGISGATAENVPVEQIVENNDIIILTPQILVNNLKKGTIPSLSIFTLMIFDECH NTSKQHPYNMIMFNYLDQKLGGSSGPLPQVIGLTASVGVGDAKNTDEALDYICKLCASLDASVIATVKHNLEELE QVVYKPQKFFRKVESRISDKFKYIIAQLMRDTESLAKRICKDLENLSQIQNREFGTQKYEQWIVTVQKACMVFQM PDKDEESRICKALFLYTSHLRKYNDALIISEHARMKDALDYLKDFFSNVRAAGFEEIEQDLTQRFEEKLQELESV SRDPSNENPKLEDLCFILQEEYHLNPETITILFVKTRALVDALKNWIEGNPKLSFLKPGILTGRGKTNQNTGMTL PAQKCILDAFKASGDHNILIATSVADEGIDIAQCNLVILYEYVGNVIKMIQTRGRGRARGSKCFLLTSNAGVIEK EQINMYKEKMMNDSILRLQTWDEAVFREKILHIQTHEKFIRDSQEKPKPVPDKENKKLLCRKCKALACYTADVRV IEECHYTVLGDAFKECFVSRPHPKPKQFSSFEKRAKIFCARQNCSHDWGIHVKYKTFEIPVIKIESFVVEDIATG VQTLYSKWKDFHFEKIPFDPAEMSK

2471/2825 FIGURE 2190

GGGGGGCACAGGGAGACTAAAAAGGCCAGGGAAGTTGGCCTGCCGGAAGTTCCCAGGGAGAAGGCAGCGCGTTG AACCGCATTCACAAAAAAGAAATCCTCTTTTTAGAACATCTCTTTGGTGGTACCATCAGAAAATGCTCTTCATTAAGT GGAAAAGTCCAAACCGTTTTGGGCCTTGTAGAGCCAAGCAAACTGGGCCGTACCCTGACCCATGAACACCTGGCC ATGACCTTTGACTGCTGTTACTGTCCACCTCCCCGTGCCAGGAAGCTATTTCCAAAGAACCTATCGTGATGAAA AATTTATATTGGATTCAGAAAAACGCCTATTCCCATAAAGAAAACCTTCAATTAAATCAGGAGACAGAAGCCATA AAGGAAGAACTGTTGTATTTTAAAGCTAATGGTGGAGGGGCTTTGGTGGAAAACACAACCACTGGGATTAGCCGA GACACACAGACGTTGAAGAGGCTTGCAGAAGAGACTGGCGTCCATATCATATCTGGAGCCGGGTTTTATGTGGAT GGAGCTGATGGAACCAGTATCAAGTGTGGCATTATTGGAGAAATTGGTTGCTCCTGGCCTTTGACTGAGAGTGAA TCCAGGGCACCATTTCAGATTATCCGAATATTGCAAGAAGCAGGCGCAGACATCTCCAAAACAGTCATGTCACAC CTGGATAGGACTATTCTTGATAAGAAAGAGCTCTTGGAGTTTGCTCAACTTGGCTGCTACTTGGAATATGATCTC TTTGGTACTGAACTACTTCATTACCAACTCGGCCCAGATATTGACATGCCTGATGATAACAAAAGAATTAGAAGG ATGAAATATGGAGGTCACGGCTATTCTCATATACTCACCAATGTTGTTCCTAAAATGTTGCTGAGAGGCATAACT GAGAATGTGCTTGATAAGATTCTAATAGAGAACCCTAAGCAATGGCTAACTTTCAAATAGGATGGTTGCTTATGA ATTCACACCTTGAGTATAAAACTTGCAGAGAACATTCAGCGATTTCCAGTCCACTGTGAGATATTAATCAGTTAC CTAGGACTAATGACAGATCATTTCCTTCTGATGAGAACTAGGAGGGTTTGCCTTCTCTGAGACCAGCTATTACAA ATTTCTAAACAATGATTTAAAGTCTATATCCCCTAAGCGGAGTTGTTTTTTCTCCCTAATCTATCAGCTGCAC TACTTGAGAAAATTTAAAGTGTTTCTAGTTAAATTATTTCCTTCTTGAGCGATCTAATGTTTCTTGTAATATTGA TGATCCTACTAATTATCCTGCTGTTCTTTAATTAATGCTTAATGAATAATATGGCACTGTAAAATAGCTTCTGCA TTGGCTTTCCGGTATCTATTTTTGCCATACATTTTGCTGTTTTTGCAAAGTTTGTATAAGAACACATAACACTACT GAATTATAAAAATTCAATCATAAAAGTCAAAATATATTACATAATATAGTTTAATGAATCATTACATTATAATA CCCTTTATTTCCTTTACCTTTTGTTTTTCCTTGGACCTAAACAGAGAAAATAATGCTTATGTATCTGAAGAAAAAG GTCAGATCTATTGGAAATGACAGCCCGATACTTGAGCCTCCTCTTTAAAAGGTATCCAGCCCTGATATTTTGTGT AAATAAAATGTTTTTAAAACCTGTTAGTTAAAACACTTAGGTGATGGGCACTGCTGCTTATAAATTCATCTTTTG GTTGAATCCTCACTATGCTATTTGGTACCTAAAAATATTCTCCAAACCCTTGCTGCCAGTTCCTCTTTGATAAAT ATATAGTTAATTCGAAATAAAATCCATTGCAATTCATTTATGAGTTATCTTACATATCACAAAGACCAATTAGAA TTAGTCATTATTCTTGATGAAGAGTCTGTTTTTAATCATAAAAATCATGACAGTTACTCAGACCCAGGCATTTCA ATTTCTGCTGATCAAAGATGATCAAGCTTTCTGTGTATTGGAACAGAAAGTAACAAAGAGGAATGAGCCAGGAGA

FIGURE 2191

MSSLSGKVQTVLGLVEPSKLGRTLTHEHLAMTFDCCYCPPPPCQEAISKEPIVMKNLYWIQKNAYSHKENLQLNQ ETEAIKEELLYFKANGGGALVENTTTGISRDTQTLKRLAEETGVHIISGAGFYVDATHSSETRAMSVEQLTDVLM NEILHGADGTSIKCGIIGEIGCSWPLTESERKVLQATAHAQAQLGCPVIIHPGRSSRAPFQIIRILQEAGADISK TVMSHLDRAILDKKELLEFAQLGCYLEYDLFGTDLLHYQLGPDIDMPDDNKRIRRVRLLVEEGCEDRILVAHDIH TKTRLMKYGGHGYSHILTNVVPKMLLRGITENVLDKILIENPKQWLTFK

2473/2825 FIGURE 2192

AACTGATCGCGGCCTAGTCCCGACGCGTGTGTGCTAGTGAGCCGGACGGCGACGGCGGCAGTGGCGGCCCGGC CTGCAGGAGCCCGACGGGGTCTCTGCCATGGGGGAGTGACGCCCTGCACCCGCTGTTCCGCGGCAGCGGCGAGA CATGAGGAGACCCCGCGACAGGGGCAGCGGCGGCTCGTGAGCCCCGGGATGGAGGAGAAATACGGCGGGGAC GTGCTGGCCGGCCGGCGGCGGCGGCCTTGGGCCGGTGGACGTACCCAGCGCTCGATTAACAAAATATATT GTGTTACTATGTTTCACTAAATTTTTGAAGGCTGTGGGACTTTTCGAATCATATGATCTCCTAAAAGCTGTTCAC ATTGTTCAGTTCATTTTTATATTAAAACTTGGGACTGCATTTTTTTATGGTTTTGTTTCAAAAGCCATTTTCTTCT GGGAAAACTATTACCAAACACCAGTGGATCAAAATATTTAAACATGCAGTTGCTGGGTGTATTATTTCACTCTTG TGGTTTTTTGGCCTCACTCTTTGTGGACCACTAAGGACTTTGCTGCTATTTGAGCACAGTGATATTGTTGTCATT TCACTACTCAGTGTTTTGTTCACCAGTTCTGGAGGAGGACCAGCAAAGACAAGGGGAGCTGCTTTTTTCATTATT GCTGTGATCTGTTTATTGCTTTTTGACAATGATGATCTCATGGCTAAAATGGCTGAACACCCTGAAGGACATCAT GACAGTGCTCTAACTCATATGCTTTACACAGCCATTGCCTTCTTAGGTGTGGCAGATCACAAGGGTGGAGTATTA TTGCTAGTACTGGCTTTGTGTTGTAAAGTTGGTTTTCATACAGCTTCCAGAAAGCTCTCTGTCGACGTTGGTGGA CTGGATTTCTACGTGGATTCCATTTGTTCAGTCAAAATGGAAGTTTCCAAATGTGCTCGTTATGGATCCTTTCCC ATTTTTATTAGTGCTCTCCTTTTTGGAAATTTTTGGACACATCCAATAACAGACCAGCTTCGGGCTATGAACAAA GCCAATATCTTATCATCTCCCTCTAAGAGAGGACAAAAAGGTACCCTTATTGGATATTCTCCTGAAGGAACACCT CTTTATAACTTCATGGGTGATGCTTTTCAGCATAGCTCTCAATCGATCCCTAGGTTTATTAAGGAATCACTAAAA CAAATTCTTGAGGAGAGTGACTCTAGGCAGATCTTTTACTTCTTGTGCTTGAATCTGCTTTTTACCTTTGTGGAA TTAGTCATGGGACTTTTTGCTGCCCTGATGAGTAGGTGGAAAGCCACTCGGATTTTCTCCTATGGGTACGGCCGA ATAGAAATTCTGTCTGGATTTATTAATGGACTTTTTCTAATAGTAATAGCGTTTTTTTGTGTTTATGGAGTCAGTG GCTAGATTGATCCTCCAGAATTAGACACTCACATGTTAACACCAGTCTCAGTTGGAGGGCTGATAGTAAAC CTTATTGGTATCTGTGCCTTTAGCCATGCCCATAGCCATGCCCATGGAGCTTCTCAAGGAAGCTGTCACTCATCT GATCACAGCCATTCACACCATATGCATGGACACAGTGACCATGGGCATGGTCACAGCCACGGATCTGCGGGTTGGA GGCATGAATGCTAACATGAGGGGTGTATTTCTACATGTTTTGGCAGATACTCTTGGCAGCATTGGTGTGATCGTA TCCACAGTTCTTATAGAGCAGTTTGGATGGTTCATCGCTGACCCACTCTGTTCTCTTTTTATTGCTATATTAATA TTTCTCAGTGTTGTTCCACTGATTAAAGATGCCTGCCAGGTTCTACTCCTGAGATTGCCACCAGAATATGAAAAA GAACTACATATTGCTTTAGAAAAGATACAGAAAATTGAAGGATTAATATCATACCGAGACCCTCATTTTTGGCGT CATTCTGCTAGTATTGTGGCAGGAACAATTCATATACAGGTGACATCTGATGTGCTAGAACAAAGAATAGTACAG CAGGTTACAGGAATACTTAAAGATGCTGGAGTAAACAATTTAACAATTCAAGTGGAAAAGGAGGCATACTTTCAA CATATGTCTGGCCTAAGTACTGGATTTCATGATGTTCTGGCTATGACAAAACAAATGGAATCCATGAAATACTGC AAAGATGGTACTTACATCATG**TGA**GATAACTCAAGAATTACCCCTGGAGAATAAACAATGAAGATTAAATGACTC AGTATTTGTAATATTGCCAGAAGGATAAAAATTACACATTAACTGTACAGAAACAGAGTTCCCTACTACTGGATC AAGGAATCTTTCTTGAAGGAAATTTAAATACAGAATGAAACATTAATGGTAAAAGTGGAGTAATTATTTAAATTA TGTGTATAAAAGGAATCAAATTTTGAGTAAACATGATGTATTACATCATCTTCGAAAATAGATATGATGGATTCT AGTGAAGACCAAAATTACTTCTGTTTACTTTCTATCAGGAAGCATCTCCATTGTAAATATGTATTTACATGTTTA TTACAAAGACCCAAATGAAAAATTTTTAGTCCATTTTTTGCATAGCCTAAAGATAAAATAGGAATAAAAGTTCTA TATTTATGGAAAAAAAAAAAAAAAAAA

2474/2825 FIGURE 2193

MAKMAEHPEGHHDSALTHMLYTAIAFLGVADHKGGVLLLVLALCCKVGFHTASRKLSVDVGGAKRLQALSHLVSV LLLCPWVIVLSVTTESKVESWFSLIMPFATVIFFVMILDFYVDSICSVKMEVSKCARYGSFPIFISALLFGNFWT HPITDQLRAMNKAAHQESTEHVLSGGVVVSAIFFILSANILSSPSKRGQKGTLIGYSPEGTPLYNFMGDAFQHSS QSIPRFIKESLKQILEESDSRQIFYFLCLNLLFTFVELFYGVLTNSLGLISDGFHMLFDCSALVMGLFAALMSRW KATRIFSYGYGRIEILSGFINGLFLIVIAFFVFMESVARLIDPPELDTHMLTPVSVGGLIVNLIGICAFSHAHSH AHGASQGSCHSSDHSHSHHMHGHSDHGHGHSHGSAGGGMNANMRGVFLHVLADTLGSIGVIVSTVLIEQFGWFIA DPLCSLFIAILIFLSVVPLIKDACQVLLLRLPPEYEKELHIALEKIQKIEGLISYRDPHFWRHSASIVAGTIHIQ VTSDVLEQRIVQQVTGILKDAGVNNLTIQVEKEAYFQHMSGLSTGFHDVLAMTKQMESMKYCKDGTYIM

2475/2825 FIGURE 2194

2476/2825 FIGURE 2195

MGFIFSKSMNESMKNQKEFMLMNARLQLERQLIMQSEMRERQMAMRIAWSREFLKYFGTFFGLAAISLTAGAIKK KKPAFLVPIVPLSFILTYQYDLGYGTLLERMKGEAEDILETEKSKLQLPRGMITFESIEKARKEQSRFFIDK

2477/2825 FIGURE 2196

Φ

2478/2825 FIGURE 2197

MELEQREGTMAAVGFEEFSAPPGSELALPPLFGGHILESELETEVEFVSGGLGGSGLRERDEEEEAARGRRRRQR ELNRRKYQALGRRCREIEQVNERVLNRLHQVQRITRRLQQERRFLMRVLDSYGDDYRASQFTIVLEDEGSQGTDA PTPGNAENEPPEKETLSPPRRTPAPPEPGSPAPGEGPSGRKRRRVPRDGRRAGNALTPELAPVQIKVEEDFGFEA DEALDSSWVSRGPDKLLPYPTLASPASD

2479/2825 FIGURE 2198

AGAGAGCTGTTTACTAGGCACGACTGCGAAGGCAAGGGGGGCACCAGCTCAGGACTGCATCTGCCTTCCC GCCCGCCCAAGGCCTCGGTGGCCGACCAGCTGCTGTTCATGAGCATCATAGTCCTCGTGATTGTGGTCATCTG $\verb|CCTGATGTTATACGCTCTTCTCTGGGAGGCTGGCAACCTCACTGACCTGCCCAACCTGAGAATCGGCTTCTATAA||$ CTTCTGCCTGTGGAATGAGGACACCAGCACCCTACAGTGTCACCAGTTCCCTGAGCTGGAAGCCCTGGGGGTGCC TCGGGTTGGCCTGGCCTGGCCAGGCTTGCCGTGTCCTCACCCTCTTTGCCCCCCAGCCTCT $\tt CCTCCTAGCCCAGTGCAACAGTGATGAGAGAGCGTGGCGGCTGGCAGTGGGCTTCCTGGCTGTCCTCTGTGCT$ TCTAGCTCTGGGCAGCGCCCAGGCCTTACTCATCCTCTTGCTTATAGCCATGGCTGTGTTCCCTCTGAGGGCTGA GAGGGCTGAGAGCAAGCTTGAGAGCTGCTAAAGGCTTACGTGATTGCAAGGGTTCAGTTCCAACCATAGTCAGAG GTGGCACATCTCGCTCAGCCATCTCATTTTACAGCTAACGCTGATCTCCAGCTCCAGCGATGGAACCCACTACAGA GGAGGTGGGGCCCCTGTGTCAAAGAGGCCGAGGGGCAGCAAGGGCAGCCAGGGCACCTGTGACTTCTTAGTACAA GATTGTCTGTCCTTCAGGACTTCCAAGGCTCCCAAAGACTCCCTAAACCATGCAGCTCATTGTCACACCAATTCC GCCAGACTTCCAGGCTGATTTGCCAAATGCCAAAATGAAACCTAGCAAAGAACTTACGGCAACAAACGAGGACAT CGCCATAAGCCATCACTGGAACTCCAACCCCAGAGGTCCAGGAGTGATCTCTGAGTGACTCAACAAAGACAGGAC ACATGGGGTACAAAGACAAGGCTTGACTGCTTCAAAGCTTCCCTGGACCTGAAGCCAGACAGGGCAGAGGCGTCC GCTGACAAATCACTCCCATGATGAGACCCTGGAGGACTCCAAATCCTCGCTGTGAACAGGACTGGACGGTTGCGC ACAAACAAACGCTGCCACCTCCACTTCCCAACCCAGAACTTGGAAAGACATTAGCACAACTTACGCATTGGGGA ATTGTGTGTATTTCTAGCACTTGTGTATTGGAAAACCTGTATGGCAGTGATTTATTCATATATTCCTGTCCAAA GCCACACTGAAAACAGAGGCAGAGACATGT

2480/2825 FIGURE 2199

MAGPRPRWRDQLLFMSIIVLVIVVICLMLYALLWEAGNLTDLPNLRIGFYNFCLWNEDTSTLQCHQFPELEALGV PRVGLGLARLGVYGSLVLTLFAPQPLLLAQCNSDERAWRLAVGFLAVSSVLLAGGLGLFLSYVWKWVRLSLPGPG FLALGSAQALLILLLIAMAVFPLRAERAESKLESC

2481/2825 FIGURE 2200

FIGURE 2201

MGALVIRGIRNFNLENRAEREISKMKPSVAPRHPSTNSLLREQISLYPEVKGEIARKDEKLLSFLKDVYVDSKDP VSSLQVKAAETCQEPKEFRLPKDHHFDMINIKSIPKGKISIVEALTLLNNHKLFPETWTAEKIMQEYQLEQKDVN SLLKYFVTFEVEIFPPEDKKAIRSK

2483/2825 FIGURE 2202

2484/2825 FIGURE 2203

 ${\tt MQAQAPVVVVTQPGVGPGPAPQNSNWQTGMCDCFSDCGVCLCGTFCFPCLGCQVAADMNECCLCGTSVAMRTLYR} \\ {\tt TRYGIPGSICDDYMATLCCPHCTLCQIKRDINRRRAMRTF}$

2485/2825 FIGURE 2204

GTGACCGGAGGCGAGAAACCCCGCCTCGGCACCCTGACGCAGCGCAGGACCCGCCCCGCGCGTGACGCCAGCGTC AGGCCAGCCCGGCATCCTCTGCGGCCGCCCGCGGTCCAGCTCCGACAACAGGAATTTTCTCCGAGAGCGGGCCG GGCTCAGTTCAGCTGCTCAGACCCGGATCGGCAACAGTGCCGCCTCCAGACGTTCTCCTGCCGCTCGCCCGC TTCTCGTGGTCGCCGTCGCCGTCGTGGTGGTAGTCTCCGCCGTCGCCTGGGCCATGGCCAATTACATCCACG TCCCTCCCGGCTCCCCGGAGGTGCCCAAGCTGAACGTCACCGTTCAGGATCAGGAGGAGCATCGCTGCCGGGAGG GGGCCCTGAGCCTCCTGCAACACCTGCGGCCTCACTGGGACCCCCAGGAGGTGACCCTGCAGCTCTTCACAGATG GAATCACAAATAAACTTATTGGCTGTTACGTGGGAAACACCATGGAGGATGTAGTCCTGGTGAGAATTTATGGCA ATAAGACTGAGTTATTAGTCGATCGAGATGAGGAAGTAAAGAGTTTTCGAGTGTTGCAGGCTCATGGGTGTGCAC TCTGCAACCCAGCCATTTTCAGGCTAATAGCTCGTCAGCTTGCTAAAATCCATGCTATTCATGCACACAATGGCT ACATTAATAAAAGGTTCCTAAGTGATATCCCAAGCTCTCAGATTCTCCAGGAAGAGATGACTTGGATGAAGGAGA TTCTTTCCAACCTGGGCTCACCTGTTGTGCTTTGCCATAATGACCTATTGTGTAAGAATATAATCTACAATGAGA AACAAGGTGATGTACAGTTCATTGATTATGAATATTCTGGATACCAACTACCTGGCATATGATATTGGAAATCATT TCAATGAATTTGCAGGTGTGAGTGATGTAGACTATAGTCTGTATCCAGATAGAGAACTACAGAGTCAGTGGCTGC GTGCTTACCTTGAAGCCTACAAAGAATTTAAGGGCTTTGGGACTGAAGTTACTGAAAAGGAGGTAGAAATACTCT TCATTCAAGTCAATCAGTTTGCATTGGCTTCTCATTTCTTTTGGGGGATTGTGGGCTTTGATTCAAGCCAAATACT CCACTATTGAGTTTGATTTCCTTGGGTATGCAATTGTTCGTTTTAAACCAGTACTTTAAAATGAAGCCTGAGGTTA CTGCATTAAAAGTGCCTGAG**TAA**AGAAGAGATTTAATTATTCTCCAGTAGCTGAGCAATGCTTGTGAATCTTTTC TTAAGAAATCCCAAAAAGCCAATATTAGTTAAAATTCTGTTGTTTAATTTGGTTATCTTGCTTTATAAATTATGC CTCTAAACAATCAAATCTATTTTTGAAATAGACTGAATGATGTCAAGAAATATACCTACTGCTATCCGTATGTGG TGGATTAGAAATGTGTTAAATCTGCAAAAGGTATAAAGATGTCAGTTTAATTTCTTTGATAATTTAACCTATGTT GCAATGAAAATGTCCCAAATAAGTTTTTTAAGTTTTACTTTAATAAGATTAATTTCAGTAAACATTCTAGTTGTT CAGTGTAACCTTTTTATCTTGATGCATTGTAAGTAAAATGAATCATTTACTCTTGAAATGCCAGTCATTGACTGA TGTAGATAATTTAGGATTTTCATATAAAAATAGCTGTTTAGGAAGGTGAAATACATTCACTGTCTCTGTTGGTGG TACATCTTGTTGAATTCAATATTAGAAAGTATTTCTTTTTTGGGGTAATATAACTTAGAATTAAATCCCTGTTTCT CTATGTAGTCTGGCAGTATAAATATAAATATTTACCATATAATCTTGGAATAAGTATTAGTTAATGTTACCAAAA

2486/2825 FIGURE 2205

MLCGRPRSSSDNRNFLRERAGLSSAAVQTRIGNSAASRRSPAARPPVPAPPALPRGRPGTEGSTSLSAPAVLVVA VAVVVVVVSAVAWAMANYIHVPPGSPEVPKLNVTVQDQEEHRCREGALSLLQHLRPHWDPQEVTLQLFTDGITNK LIGCYVGNTMEDVVLVRIYGNKTELLVDRDEEVKSFRVLQAHGCAPQLYCTFNNGLCYEFIQGEALDPKHVCNPA IFRLIARQLAKIHAIHAHNGWIPKSNLWLKMGKYFSLIPTGFADEDINKRFLSDIPSSQILQEEMTWMKEILSNL GSPVVLCHNDLLCKNIIYNEKQGDVQFIDYEYSGYNYLAYDIGNHFNEFAGVSDVDYSLYPDRELQSQWLRAYLE AYKEFKGFGTEVTEKEVEILFIQVNQFALASHFFWGLWALIQAKYSTIEFDFLGYAIVRFNQYFKMKPEVTALKV PE

2487/2825 FIGURE 2206A

CGAAATGAGAGCAAAAAGGGAGAGAGCAGGAAAGCGAGCACAGGCGAGTACAGTATACAAAGTGTTTTGAGTTTC TGACTGGCGTGCCGGAAAGATCATGTTAGCACACCCAGAAACTCCACACGATGCAGACCCCAGAGGTACCAGCAG AAAGGTCCCCTCGTAGACGGAGTATCTCAGGGACCAGTACATCAGAGAAACCCAACTCCATGGACACTGCAAATA CCTCACCCTTCAAAGTACCAGGATTCTTCAGCAAGCGCCTGAAAGGCTCCATCAAGAGGACCAAAAGCCAGTCAA AGCTTGACAGAAACACGAGCTTTCGGCTTCCATCCCTTCGCAGTACAGATGACAGGTCTCGTGGGCTGCCTAAAC TAAAAGAGTCACGTTCCCATGAATCCTTGCTGAGCCCATGCAGCACAGTGGAATGTCTGGATCTTGGTAGAGGGG AACCTGTATCAGTGAAACCACTTCATAGTAGCATCCTTGGACAAGACTTCTGCTTTGAGGTTACCTACTTAAGTG CTAATAAGGACAATTGCAGGCGAGCTGAAAATGTTCTTCGTTTATGGATCATTGAAGCCAAGGACCTTGCCCCTA AAAAGAAATATTTCTGCGAACTGTGCCTTGATGATACCCTCTTTGCTCGTACAACCAGCAAGACCAAAGCAGACA ATATTTTCTGGGGCGAACATTTTGAATTCTTCAGCCTTCCACCTCTTCATAGTATCACAGTTCACATTTACAAGG ATGTGGAAAAAAAGAAAAAAGGACAAGAATAATTATGTAGGGCTAGTCAACATCCCCACTGCCAGTGTGACTG GTCGCCAATTTGTAGAAAAGTGGTATCCAGTGAGTACACCTACACCCAACAAAGGAAAGACAGGAGGACCTTCTA TTCGGATTAAATCACGTTTCCAAACTATCACCATTCTGCCTATGGAGCAATACAAAGAATTTGCAGAATTTGTCA CCAGCAACTACACCATGCTGTGTTCTGTCCTTGAGCCAGTAATTAGTGTGAGAAATAAAGAGGAGTTGGCTTGTG GTTGTGGAGAGCATGATGTCTTGATCTTCAGAGAGAACACTATTGCCACCAAATCCATTGAGGAATACCTCAAGT TGGTGGGACAACAGTATCTTCATGACGCACTGGGGGAGTTTATCAAAGCTTTGTATGAGTCCGATGAGAACTGTG AAGTGGATCCCAGCAAATGTTCATCTAGTGAACTGATAGACCATCAGAGCAACCTGAAAATGTGCTGTGAGCTGG CTTTCTGCAAGATCATCAACTCTTACTGTTTTTCCCTCGTGAGTTGAAAGAAGTGTTTGCATCATGGAAGCAGC AGTGCCTGAACCGTGGCAAGCAAGACATCAGCGAGAGGCTCATCAGTGCCTCATTATTTCTCCGTTTTCTGTGTC CAGCCATTATGTCTCCCAGTCTTTTCAACCTTATGCAGGAGTATCCTGATGACCGCACATCTCGGACTCTAACTC TTATTGCCAAGGTCATTCAGAACCTGGCCAACTTTGCCAAGTTTGGTAACAAAGAGGAATACATGGCATTCATGA ACACCCCAGGCTTTGATGGTTACATTGATCTGGGCCGAGAGCTTTCAGTTTTGCATTCCTTACTGTGGGAAGTAG TTTCCCAACTTGATAAGGGTGAAAATTCCTTCCTACAGGCGACCGTGGCAAAATTGGGGCCTCTCCCTCGTGTTC TTGCTGATATTACCAAGTCATTGACTAATCCTACGCCAATACAACAGCAACTGAGACGCTTCACTGAACATAACT CCAGTCCAAATGTCAGTGGAAGCCTCTCCTCTGGGCTGCAGAAAATATTTGAAGACCCCACTGACAGTGATTTGC ATAAACTAAAATCTCCAAGCCAGGACAACACAGACAGCTACTTCAGAGGGAAAACATTATTGCTGGTTCAGCAAG CCTCCTCTCAGAGCATGACTTATTCTGAAAAGGATGAAAGGGAAAGTAGCCTTCCTAATGGTCGGAGCGTCTCCC CCGGAAGCCAGCTTTCCATAACCCAGGTGGCCAGCATCAAACAGCTGCGGGAAACCCAGAGCACTCCCCAAAGTG CTGTCTATCACCTCAATAACCCAATTCCAGCAATGCCAAAGGCCTCTATAGATTCCAGTTTGGAGAACCTAAGCA CTGCCAGTTCCAGAAGCCAAAGTAACAGTGAAGACTTCAAGCTCAGTGGACCCAGCAATAGCAGCATGGAAGATT TCACTAAACGTAGCACTCAGAGTGAGGACTTCTCCAGGCGGCACACGGTGCCAGATAGACACATACCTCTTGCTT GAGCAATCCAGAGACAACAGACAGCAGGTTCAGTCACCTGTGGACTCTGCCACAATGTCCCCAGTAGAGAGGA CAGCAGCCTGGGTTCTGAACAATGGGCAGTATGAAGAGGGATGTGGAAGAAACTGAGCAAAATCTAGATGAAGCCA AGCATGCTGAGAAGTATGAACAAGAAATTACTAAACTGAAGGAGCGCCTGAGAGTTTCCAGCCGGCGACTGGAGG AATATGAACGCCGCTTGCTGGTGCAGGAGCAGCAGATGCAGAAGCTGCTGGAATACAAGGCCCGACTGGAGG ACAGCGAGGAGCGGCTCCGAAGACAGCAGGAAGAAAAAGATAGCCAGATGAAAAGCATCATCAGCAGGCTAATGG CTGTGGAAGAGGAACTGAAGAAGGATCATGCTGAGATGCAAGCAGTTATTGATGCAAAGCAGAAAATAATTGATG CACAGGAAAAACGGATCGTGTCCCTGGATTCAGCCAACACCAGACTGATGAGCGCGCTGACCCAAGTGAAGGAGC GGTACAGCATGCAGGTCCGCAATGGCATCTCCCCCACCAACCCCACCAAGCTTTCCATCACGGAGAATGGTGAAT $ext{TCAAAAACAGCAGCTGC} ext{TGA} ext{CGGGCTTTGTCTGTGGAAGGAGCAGAAGGAAATTGACCCACTCTCCTATCTCCA}$

2488/2825 FIGURE 2206B

2489/2825 FIGURE 2207

t MQTPEVPAERSPRRRSISGTSTSEKPNSMDTANTSPFKVPGFFSKRLKGSIKRTKSQSKLDRNTSFRLPSLRSTDDRSRGLPKLKESRSHESLLSPCSTVECLDLGRGEPVSVKPLHSSILGQDFCFEVTYLSGSKCFSCNSASERDKWM ENLRRTVQPNKDNCRRAENVLRLWIIEAKDLAPKKKYFCELCLDDTLFARTTSKTKADNIFWGEHFEFFSLPPLH SITVHIYKDVEKKKKKDKNNYVGLVNIPTASVTGRQFVEKWYPVSTPTPNKGKTGGPSIRIKSRFQTITILPMEQ YKEFAEFVTSNYTMLCSVLEPVISVRNKEELACALVHILQSTGRAKDFLTDLVMSEVDRCGEHDVLIFRENTIAT KSIEEYLKLVGQQYLHDALGEFIKALYESDENCEVDPSKCSSSELIDHQSNLKMCCELAFCKIINSYCVFPRELK EVFASWKQQCLNRGKQDISERLISASLFLRFLCPAIMSPSLFNLMQEYPDDRTSRTLTLIAKVIQNLANFAKFGN KEEYMAFMNDFLEHEWGGMKRFLLEISNPDTISNTPGFDGYIDLGRELSVLHSLLWEVVSQLDKGENSFLQATVA KLGPLPRVLADITKSLTNPTPIQQQLRRFTEHNSSPNVSGSLSSGLQKIFEDPTDSDLHKLKSPSQDNTDSYFRG KTLLLVQQASSQSMTYSEKDERESSLPNGRSVSLMDLQDTHAAQVEHASVMLDVPIRLTGSQLSITQVASIKQLR ETQSTPQSAPQVRRPLHPALNQPGGLQPLSFQNPVYHLNNPIPAMPKASIDSSLENLSTASSRSQSNSEDFKLSG PSNSSMEDFTKRSTQSEDFSRRHTVPDRHIPLALPRQNSTGQAQIRKVDQGGLGARAKAPPSLPHSASLRSTGSM ${\tt SVVSAALVAEPVQNGSRSRQQSSSSRESPVPKVRAIQRQQTQQVQSPVDSATMSPVERTAAWVLNNGQYEEDVEE}$ ${\tt TEQNLDEAKHAEKYEQEITKLKERLRVSSRRLEEYERRLLVQEQQMQKLLLEYKARLEDSEERLRRQQEEKDSQM}$ KSIISRLMAVEEELKKDHAEMQAVIDAKQKIIDAQEKRIVSLDSANTRLMSALTQVKERYSMQVRNGISPTNPTK LSITENGEFKNSSC

FIGURE 2208

AGACCCGACGCCCGGGGTCCTCGAAGACGCGTCCGCCGTCGCCGTCGCCATCGAACCGCTTCAGGGTGTCCAA GTTCCGGCACACCGAGGCTCGGCCGCCGCCGCGAGTCCTGGATCAGTGACATTCGAGCAGGAACCGCCCCTTC ATGCAGGAACCACATCAAATCAAGCTGCAGCTTGATCGCCTTCAACTCCGACCGTCCTGGTGTACTGGGCATTGT GCCTCTGCAAGGCCAAGGAGAGACAAGCGACGCGTGGCCCACCTGGGCTGCCATTCAGACCTAGTCACCGACTT GGACTTCTCGCCCTTTGATGACTTCCTCCTGGCCACAGGCTCGGCTGACAGGACGGTAAAACTCTGGCGACTGCC AGGGCCTGGCCAGGCCCTCAGCACCCGGGGTGGTGCTGGGCCCCGAGGACCTCCCAGTGGAGGTACTGCA GTTCCACCCCACCTCTGACGCATTCTGGTGAGCGCAGCAGCACCACTGTGAAGGTCTGGGACGCAGCCAAGCA GCAGCCCTGACAGAGCTGGCAGCCCATGGGGACCTGGTGCAGAGCGCCGTCTGGAGCCGAGATGGAGCCCTGGT GGGCACGGCGTGCAAGGACAAGCAGCTGCGGATCTTTGACCCCAGAACAAGCCGCGGGCCTCTCAGAGCACGCA CACCTCGCTTGGGTGTCTCGTGCCTCTGGACCCTGACTCTGGGCTCCTGGTCCTGGCAGGAAAGGGCGAGAG GCAGCTGTACTGTTACGAGGTGGTCCCGCAGCAGCCGGCGCTGAGCCCAGTGACCCAGTGTGTCCTGGAGAGCGT GCTGCGTGGGGCTGCCCTTGTGCCCCGGCAGGCGCTGGCCGTCATGGGCTGCGAGGTACTCCGCGTCCTACAGCT GAGCGACACGCCATCGTGCCCATCGGCTACCATGTGCCCCGCAAGGCTGTGGAGTTCCACGAGGACCTGTTCCC GGACACTGCCGGCTGTGTGCCTGCCACCGACCCCCATGGCTGGTGGGCTGGGGACAACCAGCAGGTGCAGAAGGT CACAGCCCAGCCTGCGGTGATGGAGACACCCGTGGGTGATGCAGACGCAAGCGAGGGTTTCTCTCCCCTCCCAG TTCGCTGACCTCGCCCTCCACGCCTCCAGCCTGGGGCCCTCACTCTCCAGCACCAGTGGCATCGGGACCAGCCC ${\tt CAGTTTGAGGTCGCTGCAGAGCCTGCTGGGCCCCAGTTCCAAGTTCCGCCATGCTCAGGGCACTGTCCTGCACCGCCATGCTCAGGGCACTGTCCTGCACCGCCATGCTCAGGGCACTGTCCTGCACCGCCATGCTCAGGGCACTGTCCTGCACCGCCATGCTCAGGGCACTGTCCTGCACCGCCATGCTCAGGGCACTGTCCTGCACCGCCATGCTCAGGGCACTGTCCTGCACCGCCATGCTCAGGGCACTGTCCTGCACCGCCATGCTCAGGGCACTGTCCTGCACCGCCATGCTCAGGGCACTGTCCTGCACCGCCACGTTCCAAGTTCCAAGTTCCAAGTTCCAAGTTCCAAGTTCCAAGTTCCAAGTTCCAAGTTCCAAGGGCACTGTCCTGCACCGCACTGCTCAGGGCACTGTCCTGCACCGCACTGCTCAAGTTCAAGTTC$ AGACAGCCACATCACCAACCTCAAGGGGCTCAACCTCACCACACCTGGTGAGAGTGACGGCTTCTGTGCCAACAA GCTGCGTGTGGCCGTGCCGCTCCTCAGCAGCGGGGGACAGGTGGCTGTGCTTGAGCTACGGAAGCCTGGCCGCCT TCGCCTCGCTGTGGCTGGTGAGGACGCCAGGATCCGACTGTGGCGGGTACCCGCAGAGGGCCTGGAAGAGGTGCT TGTGCTGGCCTCGTCCTCTATGACCTCACTGTTCGCATCTGGGACCTTCAGGCTGGAGCTGATCGGCTGAAGCT GCAGGGCCACCAAGACCAGATCTTCAGCCTGGCCTGGAGTCCTGATGGGCAGCAGCTGGCCACTGTCTGCAAGGA TGGGCGTGTGCGGGTCTACAGGCCCCGGAGTGGCCCTGAGCCCCTGCAGGAAGGCCCAGGGCCCAAGGGAGGACG GCTGCTCCTATATGAAGCTGAGGCCCTGGCCGGCGGACCCTTGGCAGTGTTGGGCCTGGACGTGGCTCCCTCAAC CGAGCTGCTCCCCGAGTCCCCTTTCTTCCTGGAGTGCAACAGCTTCACGTCGCCTGACCCCCACAAGGGCCTCGT $\verb|CCTCCTGCCTAAGACGGAGTGCGACGTGCGGGAAGTGGAGCTGATGCGGTGCCTGCGGTCAGTCCTCCCT|\\$ GGAGCCTGTGGCCTTCCGGCTGCCCCGAGTCCGGAAAGAGTTCTTCCAGGATGACGTGTTCCCAGACACGGCTGT GATCTGGGAGCCTGTGCTCAGTGCCGAGGCCTGGCTGCAAGGCACTAATGGGCAGCCCTGGCTTCTCAGCCTGCA GCCTCCTGACATGAGCCCAGTGAGCCCAAGCCCCCGAGAGGCCCCTGCTCGTCGGGCCCCATCCTCAGCGCAGTA CCTGGAAGAAAGTCTGACCAGCAAAAGAAGGAGGAGCTGCTGAATGCCATGGTGGCAAAACTGGGGAACCGGGA GGACCCACTCCCCAGGACTCCTTTGAAGGCGTGGACGAGGACGAGTGGGACTAGCCTGCGCCCCGTCACCTCC ACCTCACCTGTGCTGCCACTTCCTAGTGCACACCTCACGGCTCATCCTCAAGCTGGAAGATACCTCTCTGGCCCC GGCACATGTCACCCTGCACTCCTGCCTTCCCGTGGGCACTTCCACATCCTCTGGGCCTCTGGCAGTTCCCAGGG ACTGTTTTCACCTCTGCTGTCTCTGGGGTCAGCTGCTCATCAGCTGCCCGCTAGCATGTGGCCAGGGGTGCA GGGTGGCGGGGGTCAGCAGCATGTCCCTGGGCAGGCCCTGGGCACCCTGTCTCCCCTGGTCTCACTGCTGACCT GGGCTGGTCCCAGCCTGGATTGGCCTCATCCAGGATCTTTGGTCACCCCACGCTGCCCCATCTTGCCTGCTGTTC ACCAGCTGCCCTACTTCCCAGGTTTGTAGCCAGGAGAAGGGGGCCATCACAGAGCTGATGGTCCAATAAGGGGGGT GTGAGCCCCGCAGGGACTGGCCCGCACCTGCCTTGGATGTTTTCAGCAATTAAACTTTTTTAAGCTGGCAAAAAA

2491/2825 FIGURE 2209

MNRFRVSKFRHTEARPPRRESWISDIRAGTAPSCRNHIKSSCSLIAFNSDRPGVLGIVPLQGQGEDKRRVAHLGC
HSDLVTDLDFSPFDDFLLATGSADRTVKLWRLPGPGQALPSAPGVVLGPEDLPVEVLQFHPTSDGILVSAAGTTV
KVWDAAKQQPLTELAAHGDLVQSAVWSRDGALVGTACKDKQLRIFDPRTKPRASQSTQAHENSRDSRLAWMGTWE
HLVSTGFNQMREREVKLWDTRFFSSALASLTLDTSLGCLVPLLDPDSGLLVLAGKGERQLYCYEVVPQQPALSPV
TQCVLESVLRGAALVPRQALAVMGCEVLRVLQLSDTAIVPIGYHVPRKAVEFHEDLFPDTAGCVPATDPHGWWAG
DNQQVQKVSLNPACRPHPSFTSCLVPPAEPLPDTAQPAVMETPVGDADASEGFSSPPSSLTSPSTPSSLGPSLSS
TSGIGTSPSLRSLQSLLGPSSKFRHAQGTVLHRDSHITNLKGLNLTTPGESDGFCANKLRVAVPLLSSGGQVAVL
ELRKPGRLPDTALPTLQNGAAVTDLAWDPFDPHRLAVAGEDARIRLWRVPAEGLEEVLTTPETVLTGHTEKICSL
RFHPLAANVLASSSYDLTVRIWDLQAGADRLKLQGHQDQIFSLAWSPDGQQLATVCKDGRVRVYRPRSGPEPLQE
GPGPKGGRGARIVWVCDGRCLLVSGFDSQSERQLLLYEAEALAGGPLAVLGLDVAPSTLLPSYDPDTGLVLLTGK
GDTRVFLYELLPESPFFLECNSFTSPDPHKGLVLLPKTECDVREVELMRCLRLRQSSLEPVAFRLPRVRKEFFQD
DVFPDTAVIWEPVLSAEAWLQGTNGQPWLLSLQPPDMSPVSQAPREAPARRAPSSAQYLEEKSDQQKKEELLNAM
VAKLGNREDPLPQDSFEGVDEDEWD

2492/2825 FIGURE 2210

 $\texttt{CAGTGCTGCGGGCTCCGGGCA} \underline{\textbf{ATG}} \texttt{GATGCCCCCGGGGCCCTGGCCCAGACCGCCCCCGGTCCGGGCAGGAAG}$ GAGCTGAAGATCGTGGTGGGCGACGGCGGCTGCGGCAAGACCTCGCTGCTCATGGTGTACAGCCAGGGCTCC TTCCCCGAGCACTACGCCCCATCGGTGTTCGAGAAGTACACGGCCAGCGTGACCGTTGGCAGCAAGGAGGTGACC CTGAACCTCTACGACACGGCCGGGCAAGAAGACTATGACCGGCTGCGGCCCCTGTCCTACCAGAACACCCCACCTC GTGCTCATCTGCTATGACGTCATGAATCCCACCAGCTACGACAACGTCCTCATCAAGTGGTTCCCTGAGGTCACG AAGCTCCGGGCCGCCCAGCTGGAGCCCATCACCTACATGCAGGGCCTGAGCGCCTGCGAACAGATCCGAGCTGCT CTCTACCTGGAATGTTCCGCCAAGTTTCGGGAGAATGTGGAGGACGTCTTCCGGGAGGCCGCCAAGGTGGCTCTC CACGACAGCACTGACAGGGCCCGGGGGCCCAGGTGCCGATTGCACCAGGGAGGCTGCCCCATCCCGACCCTCCAG CCACAAACTCCCCTCCAGGCTGCCCCTGGGACATGGTGGTGATGTGGGTGCAGGAGCCAGTGTCTGTTGTCGGGA CTCGCAAGTGCCCTCATCACAGCCACCCCCACCACGAGTGTCTCCCCAGTGCAGACTCAAGTTATGCTTGAAATG AAAAAGTCTATCTGGTAGTGGGTAAACGTAGACCTGGCACTGTTCCACGCGGGCGCCCCAAGCCTGCCACTCCTG CCCACATGGAAGACTTGTCTTCAACTTGGCCACTGTCTTTGCAGAGCTGGGCACATGTGCCCAGGGGGCAGAAAA AATGGCTTCTCAGTTGTTAAAAGTATACCCTGGACCACCCATCTGACCATCTCCTTAAGGTTTCACCCAAAGCCC CCAGTGTCAGAGACTTGGGATGGGAAGAACAGTCGGCTCCCAGTGTGGTCATGAGCAAGTTTTCTGTGGACTGTT $\tt CCCCCACTGCGGCAGGACAGGACTGGCCCACTTAGTCCTCAAGCTCCCAACCTGCTGTCCCTCAAGCCCCGCTT$ CTACCAGCCTGTGGAGTTCAGGAGGCGAGACATCCTGGCCTCCTTTGAGAACTGATGGGATCTACCCCCTGTCCA CGCGGGACAGTTTCTCAGAACTGGTTCATAGACCACCTGTGTCACCAACAGCCAGATACCTAATCCCTGAGCCTC TCACTCAGGCTAGAGTGCAGTGGCATGATCTTGGCTCACTGCAAGCTCCACCTCCTGGGTTCAAGCGATTCTCTT GCCTCAGCCTCCTGAGTAGCTGGGACTACATGCGCACCACCACCACGTCCGGCTAATTTTTTGTATTTTTAGTAGAG ACAGGGTTTCACCATGTTGGCCAGGCTGGTCTTGAACTCCTGACCTCGTGATCCACCCGCCTTAGCCTCCCAAAG TGCTGGGATTACAGGCGTGAGCCACCGTGCCCGGCCCAGGACTTTTAAAACAAGCATCCCAGGGGATTCCGGTGC $\tt CCACCAGAAGTCGCAAGCTGCTTGGCTCTGGAGGGCGCCTAGGAGTCGGTGTCGCCTAAGATGGGATAATGGCTT$ CAGGCAACTCCCAGCCTTCCCCATATCTCCTGCCTCAGCCCCCTGGCCCAGTGCTGGGGGCGTCAGCTAAACCTG CTGCCGTACCCTGGGGAATCAACCAAGGAGTTCTTGTTCTCGAAGAACCCCAGGCCTCATGATGGTCTACGGTAG AAAAAAAAAAAAAAAAA

2493/2825 FIGURE 2211

 $\label{thm:constraint} $$\operatorname{\mathsf{MDAPGALAQTAAPGPGRKELKIVIVGDGGCGKTSLLMVYSQGSFPEHYAPSVFEKYTASVTVGSKEVTLNLYDTA}$$ $$\operatorname{\mathsf{GQEDYDRLRPLSYQNTHLVLICYDVMNPTSYDNVLIKWFPEVTHFCRGIPMVLIGCKTDLRKDKEQPRKLRAAQL}$$ $$\operatorname{\mathsf{EPITYMQGLSACEQIRAALYLECSAKFRENVEDVFREAAKVALSALKKAQRQKKRRPCLLL}$$$

2494/2825 FIGURE 2212

GTGAGCGCATGTGCGCATTTATGAGCATCTACTTGCGGCTGCACTCAGGGCCCATTTGAACCCAGTGCAGAGTTAT $\tt CTCTATGAGGAGGCCCCGGGGTCTCCAGCCCCCTCCATCTCCCCTGGGGTTTGGCATATTTGACATGGAGCCCCAT$ $\tt ATTGGAGGGAGAGACAGGTTGGGAAAAACAACAGGTTTGAGTCCTATAAAGCCATAATTTAACTCCAGTAGCT$ ${\tt GATGTCAGACAAGCTTGTCCT} \underline{{\tt ATG}} {\tt TCCTATTTGAGTGGCAGCAGCCCAGCCAGCAAGAAGGCTGGGGGTTGTC}$ ${\tt AAGGTTGTCCCCAGACCTTGCTTGCAGTGGTTGGAGAACCCAGGGGGCTGCCTTGGGCCAGAGGGAA}$ $\tt GCGGGCAGCTCTAGCCCTGGAGATTGTGGTCACATTGGGGGCTTGTTTAGGATTGGAGGGCCAGGTCACCTCCCCA$ TTTAGTGCCTTGAATCTCACTACAAGCAGCCCCCTCCCTTCCCCTTCCCCTTCTCACTCTGTTGATGTAATCCTC CCACCCCAGTGTCCATCCTAAGACAGGCATCAAAAGAGGCCCTAACTTTACTTCCCAAATGGTGCTTTTTAAAA $\mathtt{AACACCATCACTACATTAGGGGCAATTTTTTCACACCTCCCTGTCTTCAGAATG}$ $\mathtt{AGGGTGGGGGATTATGTCT}$ GGGGTGTGATGAGTGTTAACTTGGTTGTTCCAGAGGTAAACCAGGTCTCAGGGAAGAGCCTGGAGCTGCTATTGC TTAGGAAGTTGTACGTGCCTTGAAATGTCCACTACCTGAGGACGCAGCATCTGGTGGGCCCCGGGGCTGCTGGGGC CAAGGAGGACCTTGACCTTCTGGTGCCTGCCCCTCCCCGGCCTACGTGCCATCCGCGTGACGCTAGGTCAGCGC САААААААААААА

2495/2825 FIGURE 2213

 ${\tt MSYLSGSSASPARRLGVVKVVPRPCLQWLENPGGCLGPSGQREAGSSSPGDCGHIGACLGLEGQVTSPATLPSLL}\\ {\tt WGPHFRATLPEAHASIHSFSALNLIHKQPPPFPFPSHSVDVILPPPVSILRQASKEALTLLPKWCFLKNTITTLG}\\ {\tt AIFSHLPVFRM}$

2496/2825 FIGURE 2214

2497/2825 FIGURE 2215

 ${\tt MQTQAEALTAGMAGVATAAAGAWTQPQLRPVELPQRTRQVRAETPRLPQGVTNAAAHIHPQRAFPDPLGGGNRPW} \\ {\tt VPGTRCRAPPKGGWEGSHSEWQDPGRPLES}$

2498/2825 FIGURE 2216

GAATGGAATGAAAAGCCTTGTACAAGAGGCTTCGTGCCATGTTCAGCCTGCCCCTTAGCCTTCCACTGTGAGĠ ACACAGCATTCCTTCCTACCAAGTGCTGCAGCTCTCACAAGACAATCAAACAAGCCCGCACCTTGATCATGATCT TCCTAGCCTCCGGAACGCACTTTCAGACCATGCTGAAGTCTAAATTGAATGTCTTAACACTGAAAAAGGAACCTC TCCCAGCGGTCATCTTCCATGAGCCGGAGGCCATTGAGCTGTGCACGACCACCGCTGATGAAGACAAGGACTC ACAGTGGCTGCAAGCACTTTCAGACCATGCTGAAGTCTAAATTGAATGTCTTAACACTGAAAAAGGAACCTCTCC CAGCGGTCATCTTCCATGAGCCGGAGGCCATTGAGCTGTGCACGACCACCCGCTGATGAAGACAAGGACTCACA GTGGCTGCAAGGTTACCTACCTGGGCAAAGTCTCCACCACTGGCATGCAGTTTTTGTCAGGCTGCACAGAAAAGC CAGTCATTGAGCTCTGGAAGAGCACGCTAGCCCGAGAGGATGTCTTTCCGGCCAATGCCCTCCTGGAAATCC GGCCATTCCAAGTTTGGCTCCATCATCTCGACCACAAAGGGGAGGCCACAGTGCACATGGATACCTTCCAGGTGG CCCGCATCGCCTACTGCACCGCCGACCACACGTGAGCCCCAACATCTTCGCCTGGGTCTACAGGGAGATCAATG ATGACCTGTCCTACCAGATGGACTGCCACGCCGTGGAGTGCGAGAGCCAAGGCCCAAGAAACTGGCCCACG CCATGATGGAGGCCTTCAGGAAGACTTTCCACAGTATGAAGAGCGACGGGCGGATCCACAGCAACAGCTCCTCCG AAGAGGTTTCCCAGGAATTGGAATCCGATGATGGC**TGA**ATGAACTTGAGACGCTTCAGCAAAGGCAGCATTGGTC ACGGAGTTCAAGGGAATAGATGAGTAAGCAACGTTTCAAATTTGGGATGAAAAGACTGCCAAACTATTGGCTGAC CAAGGTTTTTAAATTCAGAAGAGCAATTCTAAATCTAAAGAAATGTATCATTAAAGTAATTACGTTACATTGAAA CCTGCTGCTGCTGTGAGGAGGGTGGGAGTGTGGATGGGGAGGAAGGTTCTAGGCTCTCTTATTTTT CTCATTTCCCAATGCCTCTCTGTGGGAGAGCTTCATGCCAGTTTTCACCACGCTCAGGCAAATACTCTGCAGCTG TTATTGGATGGGCCATTCCGATCTGCCTTATGAAATTCCACAAGAATGTTAGGGGCACCCTCTTTCCCCTTCTAA CATCCTTAGAGGGATGAAATCTCAGCATATGTTGCAGGACACCAAAAGGAAGAAAACAATCAAGCAAATAAAATA AACAGTCAAACAACCAGGAGTTTAAAACAACACCCCAACAACAGAAGCCTTGGCAAAGAGGAATAAGTGATCA TGTCTGATGCATCCTTGATGGCAAGCTTCAAATCTGATTTGGTATCACCGAGGAAACCTTGCCCCCATCACTCAG CATTGCACTTAGATACAGAATGAGTTAGATAAACTTGGCTTGTCTAGAGACCCATGTCATCTTAACCTAAAGGGA CTCTCACTAAAACAATCCTGAGATTTCTTAATTTCATGGTTCTTTAAATATTATAAACACAGAGTCAACATAGAA TGAAATTGTATTTGTTAAAATACACACATTGGAGGACAAGAGCAGATGACTACTTTTCGAAGTAATGCTGCTCCT TCCTAAAAGTCTGTTTTCAATCCTGGTAATATTAGGGGCACTGCGGCACCTAAGAAGCCTTAAATGAGAGCTAAT CCAATTTAGAGAGCGATGGTGTCAGCATTTCGGTCTGCATATCTGTGTGTCCGTATCTGCGTTTGTGTGCGTGTA CGTGTGCCCCTGTGTGTGGGCCCAGTTTTCAGGCATGTAGAATAAGCATGGAGTCATATTGAGGAGGACTCACTT ATATGTTTGCATTAAAAAAAAAAAAAAAAAAAAAA

2499/2825 FIGURE 2217

MFSLPLSLPLCEDTAFLPSKCCSSHKTIKQARTLIMIFLASGTHFQTMLKSKLNVLTLKKEPLPAVIFHEPEAIE LCTTTPLMKTRTHSGCKHFQTMLKSKLNVLTLKKEPLPAVIFHEPEAIELCTTTPLMKTRTHSGCKVTYLGKVST TGMQFLSGCTEKPVIELWKKHTLAREDVFPANALLEIRPFQVWLHHLDHKGEATVHMDTFQVARIAYCTADHNVS PNIFAWVYREINDDLSYQMDCHAVECESKLEAKKLAHAMMEAFRKTFHSMKSDGRIHSNSSSEEVSQELESDDG

2500/2825 FIGURE 2218

GGGGAGGTAGCCCGCAGTGCAGGGGCAGCGCGCGCGGGGCCACCGACGGGACGCGCTCCGGGAAC**ATC**GCTCG CTTCGCTCTGACTGTTGTCCGGCATGGAGAAACAAGATTTAACAAGGAGAAAATAATCCAAGGACAAGGAGTAGA TGAACCTCTTTCAGAAACTGGATTTAAACAAGCAGCAGCTGCTGGTATATTTCTGAATAATGTGAAGTTTACTCA TATGACGGTAAAGTATGACTCAAGACTTCGGGAAAGGAAATACGGGGTTGTAGAAGGCAAAGCGCTAAGTGAGCT GAGGGCCATGGCCAAAGCAGCCAGGGAAGAGTGCCCTGTGTTTACACCGCCCGGAGGAGAGACGCTGGACCAGGT GAAAATGCGTGGAATAGACTTTTTTGAATTTCTTTGTCAACTAATCCTGAAAGAAGCGGATCAAAAAGAACAGTT TTCCCAAGGATCTCCAAGCAACTGTCTGGAAACTTCTTTGGCAGAGATATTTCCTTTAGGAAAAAATCACAGCTC TAAAGTTAATTCAGACAGCGGTATTCCAGGATTAGCAGCCAGTGTCTTAGTTGTGAGTCACGGTGCTTACATGAG AAGTCTGTTTGATTATTTTCTGACTGACCTTAAGTGTTCCTTACCAGCCACTCTGAGCAGATCTGAACTTATGTC ACAGTTAAAAGCCAATTTTTAGCTCCAGTGGAACCATAGCCACATAAAACTTTAATGGACAACCATATAGAATTA ACTTATTTTGTCCAAGTACAGTTGGCATTTTCCAGAATAATTTTACCACCCTGCTAGATGTCATCTCTGGATTGC ACATGGATGAAGGAACTCAGCATTGAAAGTTGGGGGATTAGTAACCTTGTTACAACGGTTTCTTTTTCATTT TTATGTAAAGC

2501/2825 FIGURE 2219

MARFALTVVRHGETRFNKEKIIQGQGVDEPLSETGFKQAAAAGIFLNNVKFTHAFSSDLMRTKQTMHGILERSKF CKDMTVKYDSRLRERKYGVVEGKALSELRAMAKAAREECPVFTPPGGETLDQVKMRGIDFFEFLCQLILKEADQK EQFSQGSPSNCLETSLAEIFPLGKNHSSKVNSDSGIPGLAASVLVVSHGAYMRSLFDYFLTDLKCSLPATLSRSE LMSVTPNTGMSLFIINFEEGREVKPTVQCICMNLQDHLNGLTETR

2502/2825 FIGURE 2220

ACGCGCCTCGGGGAACAGCCTGGCCCAAAGCCTCACTCCTCACGTCCCAGGGGTGGACGGGGGTCCGGGAGCCTC GAGCTCCGGGCAGGCGTGGCGAGGCTGAAGTCTGGGTCTTCCGCGCCCCGCGAGGACCACGCCGCGACGTAATCG CCCGCGGGGAGGCGCGAGTGGAGCCGCAGCCCTCCCGCACTCTGCTGACCGCGCACTAGCTGTCCTTGA GGCAAGAATACTTGGGAGCGGAAAAAAGGTGGGGGTGTTCCCCGGGGCGGGGGAGGAGGGCCAAGGCCCCAGCAA GCCTCTTGGAAATCTCTCCCTGGGAGGGGACGAGGGGCCGCCTTCAGTTGCAAATGGGAAGGGCTCGGATACCGG CTGATGGCGATTATAGTGGAACTTCACCTTCACCTGCTATGCGCCCGCAGCGCGCCCCGCTCCCACGCCCGCTA GCTGAGGACCCAGACTCGCCAGGAAAGGCTAGTGAGGCTGGGGCCCGGGCCGGGCCCGGGCCGGGTCAGGGG AGGGGCCTGGCGGCAGGGGCCGCGCCTAAAGGCGCGGAGCACCCGGCGCGAGAGCGCTGAGTAGAGCGG CGCCCGCTCGAGAGAAGTGGGGCCGAGATCGCGCCGTCCCAGCCCGCCGGCGGCGTCTGCGCTCCCGGCGCCC CTTACCCCTGCTGGCCCTTGCAAGGCGCGACCGGCGGCCATGCAGCCCCGGGGCTGAGGCCGCCCCATGGCAAAG GGCCGAGGGAGGCGGCCCGGGCCCCTTCGCAGACCTGGCGCCGGGCGCGCGTGCACATGCGGGTCAAGGA CCAGGTCACGCGGCTGCGCTACCGGAGCGTACGCGAGGTGTGGCAGAGCCTCCCGCCTGGGCCCACGCAGGGTCA GACGCCTGGCGAGCCGGCCGCTAGTCTCAGCGTACTTAAGAACGTGCCCGGCCTCGCCATCCTACTTTCCAAGGA CGCGCTGGATCCGCGACAGCCCGGCTACCAGCCCCCGAATCCCCATCCTGGTCCCTCGTCCCGCCAGCCGCCCC AGCGTCCAAGAGGAGCCTAGGGGAACCCGCAGCTGGAGAAGGCTCCGCGAAGCGATCGCAACCCGAGCCAGGGGT ${\tt TGCGGACGAGGATCAGACGGCC} {\tt TGA} {\tt AACTCCGGACTGTGGGCCACCTAGTCCGGCAGGATCTTCCGCCAGCGCCT}$ CCACCTTCAGATGTACCTCCAGCCTTTCACTCCTCGGTCCTCCGGAGCCCACAACCTGGACACAGCTCCTCAAGA CAGGTAGCATGGACCTTAAGGCGACAAGAGAGGGGCCCCAGGAGTGGCAGGAGAGGATCCCCGACCACCCTAGGG AAACTTCGTGCGATAATTGCTGCTTATGCCCGTGTTGCGTGAAGACACGGAACTTCACCTTTTCTGGGACCTTCT TTGGGGGAGAATGGTGGACAGTGGGATTCTGGAAACTTGTTTGGGACCCCCAAGGGTTAAAGCCACCCAGCATTC TCTAGCTCTTTTAACACCTCTTTTCCCCCTGCTGGCCCAGAGGGAGACCCAGGACTGAACTCTCCAGGCCTCCTC

2503/2825 FIGURE 2221

 $\label{thm:predict} \\ \texttt{MENFRKVRSEEAPAGCGAEGGGPGSGPFADLAPGAVHMRVKEGSKIRNLMAFATASMAQPATRAIVFSGCGRVTT}\\ \texttt{KTVTCAEILKRRLAGLHQVTRLRYRSVREVWQSLPPGPTQGQTPGEPAASLSVLKNVPGLAILLSKDALDPRQPG}\\ \texttt{YQPPNPHPGPSSPPAAPASKRSLGEPAAGEGSAKRSQPEPGVADEDQTA} \\ \end{aligned}$

2504/2825 FIGURE 2222

AATTCCCTCCGCCGCGGTCGCTGAGCGAGTGCGGCGGGAATGCGGAACCGGCGCGCGGGCTGAGGCCGCCCGGGA TGGCGCAGGGCGGCGGCGGCGGCCCTGCGCGGGGCCCTAGCGAGCCGGGCTGACGCTCCCGGCCCCGGCCC CGGCATCGCCGGCCGCATCGCGGCCATCGCCAAGGAGCGGCGCAGGGCGGTCCTGGAGCTGCTGCAGCGG CCGGGGAACGCGCGCGGCCGGCCCCGGATCCCGACTGGGCCTCCTACACTCTGGGCGTCTTCATC GAGGAGGCCCAAGTGGAGTTCATGGCCTCCCACGGGAACGACGCCGCGAGAGCCAGGTTTGAGTCCAAAGTACCC TCCTTCTACTACCGGCCCACGCCCTCCGACTGCCAGCTCCTTCGAGAGCAGTGGATCCGGGCCAAGTACGAGCGA CAGGAGTTCATCTACCCGGAGAAGCAGGAGCCCTACTCGGCAGGGTACCGTGAGGGTTTTCTCTGGAAGCGTGGC CGGGACAACGGCCAGTTTTTGAGCCGGAAGTTTGTGCTGACAGAACGAGAGGGTGCTCTGAAGTATTTCAACAGA AATGATGCCAAGGAGCCCAAGGCCGTGATGAAGATCGAGCACCTGAATGCCACCTTCCAGCCGGCCAAGATCGGC CACCCCCACGGCCTGCAGGTCACCTGAAGGACAACAGCACCCGTAACATCTTCATCTACCATGAGGACGGG AAGGAGATTGTGGACTGGTTCAATGCACTCCGAGCTGCTCCGCTTCCACTACCTGCAGGTGGCATTCCCAGGGGCC CAAACGGAAGGCTTCCGGAAGCGCTGGTTCACCATGGATGACCGCAGGCTCATGTACTTCAAAGACCCCCTGGAC GCCTTCGCCCGAGGGGAAGTCTTCATTGGCAGCAAGGAGAGTGGCTACACGGTGCTGCATGGGTTCCCGCCGTCC ACCCAGGGCCACCACTGGCCACTCGCCACCGCCCGACCGCAAGTTTCTGTTTGCCTGCGAGACG GAGTCCGACCAGAGGGGGTGGCGGCCTTCCAGAAGGCGGTGGACAGGCCCATGCTGCCCCAGGAGTACGCA GTGGAGGCGCACTTCAAGCATAAACCT**TAG**CGAGTGCGGCTGGAGGACCACGGACATTGGACTCACTGTGGCTGG ACGGAGGGACCCGTGGATGGGGGGCCTCTGGCGTCCTGAGGCCACCTGCTCCTCAGGGCAGCCC CCTTTCCTCCAGGGCCCAGTCTGGCTCCCGAGCTCAGACACAGCCCCCAGGAGCCGCCCACCACGGCTGTGGGAA GCTCGCATGCCGCCCCGCCCTCCCCCACGACTATTTATTGAGCGCCTGTTGTGTGTCACGGGGCTATG AGGGCCGTGGGGTGTTTGGGTGGATTATCCACACAGGTCCCGGCCCCTGCCCGGGCTGGAGTTGCCACAGCCTGT GCTCCTGGTCCTCACCTGGAGGGGCCAGCAGGCTGCCGTCCCACCACACGTGGCCTCTGCGCCCAGCACGGTGCT CGCCGACAGTGGTGTCTGAACCCTTGGGGACGAGGGCCTGGGCCGCGGTGAGGCCACCAGAGGCAGGAGTGGCCC TCAAGGCAGGCCGGGCTCCAGGGCTCCCCTTGCGTGGGGCATGTAGGTGGGGGAGGCGTCTGCAGGTCACCTGGG GGGCCCAGCCTCTCCCAGCCTTGCCTGACTGTTTTCCAGGGGAGCCCTGGACAAGCCCTCATAGGCAGG GAGGGGGTTTCCGAGGCCAGGCATCCGCCCCCCGTGTCGCATCCTGGAATAAAATGTGGCTCTGGCATGGTTAA

2505/2825 FIGURE 2223

MAKERRRAVLELLQRPGNARCADCGAPDPDWASYTLGVFICLSCSGIHRNIPQVSKVKSVRLDAWEEAQVEFMAS HGNDAARARFESKVPSFYYRPTPSDCQLLREQWIRAKYERQEFIYPEKQEPYSAGYREGFLWKRGRDNGQFLSRK FVLTEREGALKYFNRNDAKEPKAVMKIEHLNATFQPAKIGHPHGLQVTYLKDNSTRNIFIYHEDGKEIVDWFNAL RAARFHYLQVAFPGASDADLVPKLSRNYLKEGYMEKTGPKQTEGFRKRWFTMDDRRLMYFKDPLDAFARGEVFIG SKESGYTVLHGFPPSTQGHHWPHGITIVTPDRKFLFACETESDQREWVAAFQKAVDRPMLPQEYAVEAHFKHKP

2506/2825 FIGURE **2224**

GGCGCCCCGCGAGCTGCGCTCTCCCCGGCCGGAGCGCTCCTCCTCCAGCCCCAGCCCGCAGGGTACTTTGCCC GGAGTCCACTGACCGCTCAAAGGT**ATG**GCGTTGACGGTGGATGTGGCCGGGCCAGCGCCCTGGGGCTTCCGTAT CACAGGGGGCAGGGATTTCCACACGCCCATCATGGTGACTAAGGTGGCCGAGCGGGGCAAAGCCAAGGACGCTGA CCTCCGGCCTGGAGACATAATCGTGGCCATCAACGGGGAAAGCGCGGAGGGCATGCTGCATGCCGAGGCCCAGAG CAAGATCCGCCAGAGCCCCTCGCCCCTGCGGCTGCAGCTGGACCGGTCTCAGGCTACGTCTCCAGGGCAGACCAA CTTAAGGTCCTCCTACTCCAGCCCAACCTCCCTCAGCCCGAGGGCCGGCAGCCCCTTCTCACCACCACCCTCTAG $\tt CAGCTCCCTCACTGGAGAGGCGGCCATCAGCCGCAGCTTCCAGAGTCTGGCATGTTCCCCGGGCCTCCCCGCTGC$ GGTGCTGCCGCCTTCCCCGGGCCCTCGTTCCTCCAGGCCCAGCATGGACTCGGAAGGGGGAAGCCTCCTCCTGGA CGAGGACTCGGAAGTCTTCAAGATGCTGCAGGAAAATCGCGAGGGACGGCCGCCCCCGACAGTCCAGCTCCTT TCGGCTCTTGCAGGAAGCCCTGGAGGCTGAGGAGAGGTGGCACGCCAGCCTTCTTGCCCAGCTCACTGAGCCC CCAGTCCTCCCTGCCCGCCTCCAGGGCCCTGGCCACCCTCCCAAGCTCCACACTTGTGAGAAGTGCAGTACCAG CATCGCGAACCAGGCTGTGCGCATCCAGGAGGGCCGGTACCGCCACCCCGGCTGCTACACCTGTGCCGACTGTGG GCTGAACCTGAAGATGCGCGGGCACTTCTGGGTGGGTGACGAGCTGTACTGTGAGAAGCATGCCCGCCAGCGCTA CATGCCTATATAAGTTGGCATGGCAGGGACAATGGTGGGCAGTTGCTCTTACATGAGCTAAGTTTGGAGACCTGA GGCCCCTTTGTCCTCGCTGGGTGGGCCAAGGTCTGGGACCTGTCTTGGACTGTGGGAGACTCACCCTCACCTTGC ${\tt CAGGCCTCTCCCCTGCAGGACTGGCATTGCACTAGTCTGAGGTGGCCACTGCCTTTGATCAACCTTTGTGTGCGA}$ TTTTTGACATACTAGCTCTATAAATATATGAATATGGACAAAAT

2507/2825 FIGURE 2225

MALTVDVAGPAPWGFRITGGRDFHTPIMVTKVAERGKAKDADLRPGDIIVAINGESAEGMLHAEAQSKIRQSPSP LRLQLDRSQATSPGQTNGDSSLEVLATRFQGSVRTYTESQSSLRSSYSSPTSLSPRAGSPFSPPPSSSSLTGEAA ISRSFQSLACSPGLPAADRLSYSGRPGSRQAGLGRAGDSAVLVLPPSPGPRSSRPSMDSEGGSLLLDEDSEVFKM LQENREGRAAPRQSSSFRLLQEALEAEERGGTPAFLPSSLSPQSSLPASRALATPPKLHTCEKCSTSIANQAVRI QEGRYRHPGCYTCADCGLNLKMRGHFWVGDELYCEKHARQRYSAPATLSSRA

2508/2825 FIGURE 2226A

CGCGCCCCGGGCTCGGCCGGCGGGGATCTAGGGGTGGGCGACTTCGCGGGACCGTGGCGCATGTTTCCTG GGAGTTACTGATCATCTTCTTTGAAGAAACATGAAGTTACACTATGTTGCTGTGCTTACTCTAGCCATCCTGATG TTCCTGACATGGCTTCCAGAATCACTGAGCTGTAACAAAGCACTCTGTGCTAGTGATGTGAGCAAATGCCTCATT CAGGAGCTCTGCCAGTGCCGGCCGGGAGAAGGCAATTGCTCCTGCTGTAAGGAGTGCATGCTGTGTCTTGGGGCC CTTTGGGACGAGTGCTGTGACTGTTGGTATGTGTAATCCTCGAAATTATAGTGACACCCTCCAACTTCAAAG TGGAACATCGTTTCTTTCCCTGTTGCAGAAGAACTTTCACATCATGAGAATCTGGTTTCATTTTTAGAAACTGTG AACCAGCCACCACCAGAATGTGTCTGTCCCCAGCAATAATGTTCACGCGCCTTATTCCAGTGACAAAGAACAC ATGTGTACTGTGGTTTATTTTGATGACTGCATGTCCATACATCAGTGTAAAATATCCTGTGAGTCCATGGGAGCA TCCAAATATCGCTGGTTTCATAATGCCTGCTGCGAGTGCATTGGTCCAGAATGTATTGACTATGGTAGTAAAACT GTCAAATGTATGAACTGCATGTTT**TAA**AGAAGACAAATGCAAACCAAAGCAACTTAGTAAAATAATAGGTATAAA AAGTTATTCTGTAAGTCTTGTTGTATCTTGTATCAGAATCCCAGTAAGTTAAGTTGTAAAGACTTTGGAATA AGTTTCTTTTAAAAATATGACATAGCCAGTGATGTTTTAATTATATAACTGTTCTTACTGATTTTATTGCCCCC TAGCAATAAGCCCTTTCCTTTGAATACATGTACAACTTTGGTCATATGAGAAGCAGGTGCGCAGAGAATTCCTTG AAAGATCTGAGGTTTTTAACATAAAGTCTGATGTGGTTTTCCTCTAGCATTCCAAAAGGTTTTTGCTTTGAAAGT GTTAGCAGAAGCATGTTGATGTGAATTATGATTTCTTCATGTGCTACTGTTAGCACACTGAGTTTTTATAGTTGC ACATCATTCCTCATTGTGCCTTGTTTTATCCATTTTATAAATAGAGTAGATATTTGATATACCACTCTGATAACT CATATAAAAATATCATCATAAAAAGCTTAATTTCATCCCTTTTATGTTGGTTTTAAAAGGTAAATGCTTACCATA TTTTATAATTGAGAACTCTTACATAGTAGAATCCATTCTATAATACATGTGTTGACAAAGCTTTAGAGAAAGTTT CCTATTCTCCATTTCCCCTGCCCAAAGTGCTGACATAGGCAGTGATGAAGAATCTTTACCAAGATTTTCAGG GTACCAGCTTAAAGAGCACTAGGGATGGGGAACGAATGCCAAATCAGACTCCACCTAGAGCACCAGGAAACAGCT TGTACCCTGGTAGGGAAATGGTGTCGCTGAAAGGGGAGGCTGAGCCAGTGCGAGACTGAACTTGTGCAGCCTTAG CCAAGACAAAGCAGTGTTTTTCAGCAGACGGCTGATGGGACAGGAATTGAAGAAGAAGAATTGACTCGTATGAACA TTAAGTTTATATCTGGATATAATGTTCTTTTTAAACAAGTATAATCATATCGTCGGAGGTTAAGATTATGAAATT TTAAAATCTCTATTCAAGATGATGTTCACTCCAAATACACTACAGAATTTAGTCAACATTTTATATAATGTTTCA ATAAATGTTTCTTTCAATAAAGATACTATGTGCCCTTCATAGTAATAAAATCTCAATCTTAAAGCATGAATCTAA AACATAAATATTTATATTACAGACTCAATTTTACAAAATTACTAATTGCTCTAGTGCATATTTGAACTACAAGCA ACTTTTTAGGAATACCTCTTTATACGTCTACATATTTTAGTATATAAAAATAGATAATGCTCTTGGACACATTTT GTATTATTCATGATCTGAATAGTAGTTAGTTAAAAGATCATTTGTAATATTATGATCAACTGTTATAAATTAAGG TCTTAATACCTTTTCTGCTCTTTCAAATAACTCTAATGAATATTCAAGATATTTTAGCCTTTTAAAAAGTTGAGA TTTAGCTCATGGATATATTTTTTGGTAGGGAAACATTAGGGTCTCCTTTTCTTCCTTTTACCTAGAATGCCTCAT TTAAAAGTGCCTTGAAAACATTTAGCTCCCCTTCTTCATGAGCATCTGTAGAGCTGAAAGTATTCTGGAACTTTA GACAGAAAGCTGAAAGGAATCTGCAGTCTCCTGCTGCTGCTCAACTCTGCTGTTTTTCAGTCATTTCCTACTGTG AGTGGAGTGATGTTTGTGTGTGTGTGGCAACATGCCTAATGTTTTCTTAATGATGACAACAAATATTTTAAAAC TGCATTTATCATTTTTTAGGTCTTCATTAAATTTTAAAATGTAATATCTGTTTCCCACCCCCTACATTAGGAGGA ATTCCATTTCCAGTTTTATAATGTATTTCAGGTTCTGAATAACAATATTTTTCCAAATTGAAAGTAAATATTCAA GAAGTTGATAGCCTGGTTAAAAGTTAGATCCTCTATTACCATTCTAAGCACATTCACTTCTATATTGAAGTTTTG GTTTTAAATCAGTGGGTATCATAAAAGCCATATATAAAAGATCCTTTCTTATAGTAAGACTTGTGCTTGTTAGCA GGTTTTTCTGTTAGTTTTTCCCCCATAACATTTAATTATTACTAAAATTGTATTTACAATAGTGGTGCCAAATCA AATGGTAATTTAAATAAAATCTATTCTGTGTTTATGTAGGGTGGTATAAAAAAAGAGGTCTTCATTTAGACATGTG AAAATGGAGAAAAGATTTTCTGAAAAAATGCAGTAAATATAAGCCACATTTCTAAAGTTTATTTTTTTATGAAA GCTTCTTTTAAGATTTTGAAATCTATTCTGCATTCCCAAGAGTTTATGTTTTATTGTATTTTATATGATCTACAAC

2509/2825 FIGURE 2226B

2510/2825 FIGURE 2227

MKLHYVAVLTLAILMFLTWLPESLSCNKALCASDVSKCLIQELCQCRPGEGNCSCCKECMLCLGALWDECCDCVG MCNPRNYSDTPPTSKSTVEELHEPIPSLFRALTEGDTQLNWNIVSFPVAEELSHHENLVSFLETVNQPHHQNVSV PSNNVHAPYSSDKEHMCTVVYFDDCMSIHQCKISCESMGASKYRWFHNACCECIGPECIDYGSKTVKCMNCMF

2511/2825 FIGURE 2228

 $\tt TTTCACCTCAGCAAGGCCAGGGGATCTGCACGTTGTGTTAGAC\textbf{ATG}{GCTAAAGTAGCTGATACCATCCTGTTCCT}$ $\verb|CCTTGATCCACTAGAAGGCTGGGACAGCACCGGTGATTACTGTCTTTCCTGCCTCTTTGCTCAGGGCCTTCCGAC| \\$ CTATACACTAGCTGTCCAGGGGATTTCTGGCCTCCCACTGAAGAAACAAATAGATACCAGGAAGAAGCTAAGTAA TTTTGTTCCTAGTGAAGAGAATAACTTGGTGGGCACCTTGAAAATTTCAGGCTATGTTCGAGGGCAGACTCTGAA CCCTTTAAATCCTAGAGGAATTAAACCCCAAAAGGACCCAGACATGGCAATGGAGATTTGTGCTACGGATGCTGT AGATGATATGGAAGAAGGTCTTAAAGTCCTAATGAAGGCAGACCCTTGTAGACAGGAATCCTTGCAAGCAGAGGT TATCCCAGATCCAATGGAGGGAGCAAACCTGGCCCACTGAGGAGGAGCTGAGCGAGGCAAAGGATTTCTTGAA GGAAAGTTCTAAGGTGGTAAAGAAGGTCCCCAAAGGAACATCCAGTTACCAAGCTGAATGGATTTTGGATGGTGG CAGCCAAAGTGGTGGGGAAGGAGATGAATATGAATATGATGATATTGGAACATGAGGATTTTATGGAGGAGGAATC TCAGGATGAGAGTAGTGAAGAAGAAGAATATGAAACTATGACTATTGGGGAGTCTGTGCATGATGATCTGTA TGATAAGAAGTAGATGAAGAAGCTGAGGCAAAAATGTTGGAGAAATATAAACAAGAAGACTGGAAGAGATGTT TCCAGATGAAGTGGACACGCCCCGTGATGTGGCTGCTCGAATTCGATTTCAGAAATACAGAGGCCTTAAGAGCTT CCGGACATCTCCATGGGATCCTAAGGAAAACCTTCCTCAAGATTATGCTCGAATATTTCAGTTTCAGAACTTTAC TAACACTAGGAAAAGCATCTTTAAAGAGGTTGAAGAAAAAGAGGTTGAAGGAGCTGAGGTTGGCTGGTATGTCAC ACTTCATGTCTCTGAAGTCCCCGTCTCAGTGGTCGAGTGCTTCAGGCAAGGAACACCCTTGATTGCATTTTCTTT ACTACCTCATGAACAGAAGATGTCAGTATTGAATATGGTGGTGAGGCGTGACCCTGGCAACACTGAACCTGTGAA AGCCAAGGAGGAGCTCATATTTCACTGTGGATTCAGGCGCTTCCGAGCCTCACCTTTATTCTCTCAGCACACTGC AGCGGACAAACATAAATTGCAGAGATTCCTGACTGCTGACATGGCCCTGGTGGCGACAGTCTATGCGCCAATCAC TTTTCCTCCTGCATCTGTGCTGCTTTTCAAGCAGAAAAGCAATGGAATGCACAGCCTCATTGCTACAGGCCATCT TATGTCAGTAGATCCAGACAGAATGGTCATCAAGAGAGTTGTTCTGAGTGGTCATCCTTTCAAAATTTTTACTAA GATGGCAGTAGTACGTTACATGTTCTTCAACAGAGAGGATGTGCTGTGGTTTAAACCAGTGGAACTGAGAACGAA GTGGGCCGGAGAGGACATATCAAGGAACCTTTAGGTACCCATGGCCACATGAAATGCAGCTTTGATGGGAAGCT AAAATCTCAAGACACAGTACTGATGAACCTGTATAAACGAGTCTTCCCCAAATGGACTTATGATCCATATGTACC AGAACCAGTACCCTGGCTGAAAAGTGAGATTTCTTCAACAGTGCCTCAAGGGGGCCATGGAG**TAA**TGGATTCAAAG AGATTCTGTCCTACCGGTGCCAGTCAGTACTCCAGGGATGGGAGGCACAAGTTGTGATTGGGCAAAGTTTATTT ATAAAAGTTTTTCCACTACTTAGTCCAAAAAAAACTATTAAATCTTAATGAAAT

2512/2825 FIGURE 2229

MAKVADTILFLLDPLEGWDSTGDYCLSCLFAQGLPTYTLAVQGISGLPLKKQIDTRKKLSKAVEKRFPHDKLLLL
DTQQEAGMLLRQLANQKQQHLAFRDRRAYLFAHAVDFVPSEENNLVGTLKISGYVRGQTLNVNRLLHIVGYGDFQ
MKQIDAPGDPFPLNPRGIKPQKDPDMAMEICATDAVDDMEEGLKVLMKADPCRQESLQAEVIPDPMEGEQTWPTE
EELSEAKDFLKESSKVVKKVPKGTSSYQAEWILDGGSQSGGEGDEYEYDDMEHEDFMEEESQDESSEEEEEYETM
TIGESVHDDLYDKKVDEEAEAKMLEKYKQERLEEMFPDEVDTPRDVAARIRFQKYRGLKSFRTSPWDPKENLPQD
YARIFQFQNFTNTRKSIFKEVEEKEVEGAEVGWYVTLHVSEVPVSVVECFRQGTPLIAFSLLPHEQKMSVLNMVV
RRDPGNTEPVKAKEELIFHCGFRRFRASPLFSQHTAADKHKLQRFLTADMALVATVYAPITFPPASVLLFKQKSN
GMHSLIATGHLMSVDPDRMVIKRVVLSGHPFKIFTKMAVVRYMFFNREDVLWFKPVELRTKWGRRGHIKEPLGTH
GHMKCSFDGKLKSQDTVLMNLYKRVFPKWTYDPYVPEPVPWLKSEISSTVPQGGME

2513/2825 FIGURE 2230

CCCGGGGCGGGACACCCCGCAGCCTCGAGGCGCGCACCCCCGCCGGCAGCGCCCCGACACCCCGGGGCGAGCG GGAAAACGGCAACGGCGGCGGCGGCGGCGGCGGGGGAAGGATCCAGGGGAAGAAGCCGGGCGGTTCGTCGGG CGGCGGCCGGAGCGGCGAGCTGCAGGGGGACGAGGCGCAGAGGAACAAGAAAAAGAAAAAGAAAAGGTGTCCTGCTT TTCCAACATCAAGATCTTCCTGGTGTCCGAGTGCGCCCTGATGCTGGCGCAGGGCACGGTGGGCGCCTACCTGGT GAGCGTCCTGACCACCCTGGAGCGTAGGTTCAACCTGCAGAGCGCTGACGTGGGTGTGATCGCTAGCAGCTTCGA CGGCGCATCGTCATGGCGCTGGGCGCTGCTGTCGGCGCTGCCCGAGTTCCTGACCCACCAGTACAAGTACGA GGCGGCGAGATCCGCTGGGGCGCCGAGGGCCGCGACGTCTGCGCAGCCAACGGCTCGGGCGGCGACGAGGGGCC CGACCCCGACCTCATCTGCCGCAACCGGACGGCTACCAACATGATGTACTTGCTGCTCATTGGGGCCCAGGTGCT CTCGCTCTATATAGGAATCCTGTTCACGATGCTGGTATTTGGACCAGCCTGCGGGTTTATCCTGGGCTCTTTCTG TACCAAAATCTACGTGGATGCGGTCTTCATTGACACAAGTAACCTGGACATCACTCCGGACGACCCCCGCTGGAT ACAGTCCCTGCCCCGCACTCAGACCCCGCCATGGAAAGCGAGCCGCCATGCTCTCCGAAAGAGAATACGAGAG ACCCAAGCCCAGCAACGGGGTCCTGAGGCACCCCCTGGAGCCAGACAGCAGTGCCTCCTGTTTCCAGCAGCTGAG AGTGATCCCGAAGGTCACCAAGCACCTGCTCTCAAACCCTGTGTTCACCTGCATCATCCTGGCCGCCTGCATGGA GATTGCAGTGGTGGCTGCCTTCGCCGCCTTTTTGGGGAAGTACCTGGAGCAGCAGTTTAACCTCACCACCTCTTC TGCCAACCAGCTGCTTGGGATGACTGCGATCCCGTGTGCTTGTCTGGGTATCTTCCTGGGAGGTCTTTTGGTGAA CTCCTTCCTCTTCCTGGGCTGCGACACTGGCCCTGTGGCTGGGGTTACTGTTCCCTATGGAAACAGCACACCC TGGCTCAGCCCTGGACCCCTACTCGCCCTGCAATAATAACTGTGAATGCCAAACCGATTCCTTCACTCCAGTGTG $\tt CCTCACCACCGTCCTGCTGAGAACGCAACCGTGGTTCCTGGAAAATGCCCCAGTCCTGGGTGCCAAGAGGCCTT$ $\verb|CCTCACTTTCCTCTGTGTGATGTGTATCTGCAGCCTGATCGGTGCCATGGCACAGACACCCTCAGTCATCATCCT| \\$ CATCAGGACAGTCAGCCCTGAACTCAAGTCTTACGCTTTGGGAGTTCTTTTTCTCCTCCTTCGTTTGTTGGGCTT AGGCGCCTGCGTCCTCTACGACAATGTGGTCTACCGATACCTGTATGTCAGCATCGCCATCGCGCTCAAATCCTT CGCCTTCATCCTGTACACCACCACGTGGCAGTGCCTGAGGAAAAACTATAAACGCTACATCAAAAACCACGAGGG CCAGACACATAGGACAAAGTTTATCTATAACCTGGAAGACCATGAGTGGTGTGAAAACATGGAGTCCGTTTTA**TA** CTTTTTCTCAGCATCAGAGCCAGACAGGATTCAGAATAAGGAGAATGACATCGTGCGGCAGGGTCCTGGAGGC CAGGCACTGCCAAATTCAGGGAACAGTGGTGGCCAGCTTGGAGGATGGACATTTCTGGATACACATACACATACA AAACAGAAAACATTTTTTAAAAGAAGTTTCCTAAAATAAA

2514/2825 FIGURE 2231

MQGKKPGGSSGGGRSGELQGDEAQRNKKKKKKVSCFSNIKIFLVSECALMLAQGTVGAYLVSVLTTLERRFNLQS
ADVGVIASSFEIGNLALILFVSYFGARGHRPRLIGCGGIVMALGALLSALPEFLTHQYKYEAGEIRWGAEGRDVC
AANGSGGDEGPDPDLICRNRTATNMMYLLLIGAQVLLGIGATPVQPLGVSYYDDHVRRKDSSLYIGILFTMLVFG
PACGFILGSFCTKIYVDAVFIDTSNLDITPDDPRWIGAWWGGFLLCGALLFFSSLLMFGFPQSLPPHSDPAMESE
QAMLSEREYERPKPSNGVLRHPLEPDSSASCFQQLRVIPKVTKHLLSNPVFTCIILAACMEIAVVAGFAAFLGKY
LEQQFNLTTSSANQLLGMTAIPCACLGIFLGGLLVKKLSLSALGAIRMAMLVNLVSTACYVSFLFLGCDTGPVAG
VTVPYGNSTAPGSALDPYSPCNNNCECQTDSFTPVCGADGITYLSACFAGCNSTNLTGCACLTTVPAENATVVPG
KCPSPGCQEAFLTFLCVMCICSLIGAMAQTPSVIILIRTVSPELKSYALGVLFLLLRLLGFIPPPLIFGAGIDST
CLFWSTFCGEQGACVLYDNVVYRYLYVSIAIALKSFAFILYTTTWQCLRKNYKRYIKNHEGGLSTSEFFASTLTL
DNLGRDPVPANQTHRTKFIYNLEDHEWCENMESVL

2515/2825 FIGURE 2232

AGAGAGGGGTGCAAGATCCTGATTTTTCAGGAGTTCAAGCGACA**ATG**GCAGCCCAATACGGCAGTATGAGCTTCA ACCCCAGCACACCAGGGGCCAGTTATGGGCCTGGAAGGCCAGAAGGCCCAGAAATTCCCAATTGAGAATTGTGTTAG TGGGTAAAACCGGAGCAGGAAAAAGTGCAACAGGAAACAGCATCCTTGGCCGGAAAGTGTTTCATTCTGGCACTG CACCAGGCATTTTCGACACAGAGGTGCCCAATGCTGAAACGTCCAAGGAGATTATTCGCTGCATTCTTCTGACCT CCCCAGGGCCTCATGCTCTGCTTCTGGTGGTTCCACTGGGCCGTTACACTGAGGAAGAGCACAAAGCCACAGAGA AGATCCTGAAAATGTTTGGAGAGAGGGCTAGAAGTTTCATGATTCTCATATTCACCCGGAAAGATGACTTAGGTG ACACCAATTTGCATGACTACTTAAGGGAAGCTCCAGAAGACATTCAAGACTTGATGGACATTTTCGGTGACCGCT ACTGTGCGTTAAACAACAAGGCAACAGGCGCTGAGCAGGAGGCCCAGAGGGCACAGTTGCTGGGCCTGATCCAGC GCGTGGTGAGGGAGAACAAGGAAGGCTGCTACACTAATAGGATGTACCAAAGGGCGGAGGAGATCCAGAAGC AGGAGGCTCACTATGCTGTAAGGCAGCAAAGGGCAAGAACGGAAGTGGAGAGTAAGGATGGGATACTTGAATTAA TCATGACAGCGTTACAGATTGCTTCCTTTATTTTGTTACGTCTGTTCGCGGAAGAT**TAA**ACTTAATGAAAATCTG CAGAGAAAATGTATGCAAGAGACCAAAAAGATGGCTCCAAGCTATGTCATGTTACCTGTAATAAAATCTTTTCTT TTATCATTTGTTCATTGAAGAACAGAGACCTGTCTGGAAAATCGATCTCTACAAATTCAATTAAATAATGATCCC CAAATGCTGAAAAAGTGAAATACAGCAATTCAACAGATAATAGAGCAATGTTTAGTATATTCAGCTGTATCTGTA GAAACTCTTTGACGAACCTCAATTTAACCAATTTGATGAATACCCAGTTCTCTTCTTTTCTAGAGAAAGATAGTT GCAACCTCACCTCACTCAACACTTTGAATACTTATTGTTTGGCAGGTCATCCACACACTTCTGCCCCCACT GCATTGAATTTTTTGCTTATGTTGTTTATAATAAAACTTTTCAATTATCTC

2516/2825 FIGURE 2233

MAAQYGSMSFNPSTPGASYGPGRQEPRNSQLRIVLVGKTGAGKSATGNSILGRKVFHSGTAAKSITKKCEKRSSS WKETELVVVDTPGIFDTEVPNAETSKEIIRCILLTSPGPHALLLVVPLGRYTEEEHKATEKILKMFGERARSFMI LIFTRKDDLGDTNLHDYLREAPEDIQDLMDIFGDRYCALNNKATGAEQEAQRAQLLGLIQRVVRENKEGCYTNRM YQRAEEEIQKQTQAMQELHRVELEREKARIREEYEEKIRKLEDKVEQEKRKKQMEKKLAEQEAHYAVRQQRARTE VESKDGILELIMTALQIASFILLRLFAED

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2517/2825 FIGURE **2234**

GGGAACCCCCTTCTTCTTCTCCTGAATGGCACCCCCGCCCTAGAATCCAGACACCGAGTTTCCCACTGTGGCT GGTTCAAGGGTATGTGAGAGCTCCCTGGTGACAGTCTGTGGCTGAGCATCGCCCTCCCAGCCCTGGGCCTGGACC CCTGGAGCCTCCTGGGCCTTTTCCTCTTCCAACTGCTTCAGCTGCTGCCGACGACGACGACGCGGGGGGAGGCG GGCAGGGGCCCATGCCCAGGGTCAGATACTATGCAGGGGATGAACGTAGGGCACTTAGCTTCTTCCACCAGAAGG GCCTCCAGGATTTTGACACTCTGCTCCTGAGTGGTGATGGAAATACTCTCTACGTGGGGGCTCGAGAAGCCATTC AGAGTGAATGTGCCTTTAAGAAGAAGAGCAATGAGACACAGTGTTTCAACCTTCATCCGTGTCCTGGTTTCTTACA ATGTCACCCATCTCTACACCTGCGGCACCTTCGCCTTCAGCCCTGCTTGTACCTTCATTGAACTTCAAGATTCCT ACCTGTTGCCCATCTCGGAGGACAAGGTCATGGAGGGAAAAGGCCAAAGCCCCTTTGACCCCGCTCACAAGCATA CGGCTGTCTTGGTGGATGGGATGCTCTATTCTGGTACTATGAACAACTTCCTGGGCAGTGAGCCCATCCTGATGC TCCACACATCGCGGGTGGCTAGAGTCTGCAAGAATGACGTGGGCGGCGAAAAGCTGCTGCAGAAGAAGTGGACCA CCTTCCTGAAGGCCCAGCTGCTCTGCACCCAGCCGGGGCAGCTGCCCTTCAACGTCATCCGCCACGCGGTCCTGC GCTCTGCGGTTTGTGCCTTCTCTCTCTTGGACATTGAACGTGTCTTTAAGGGGAAATACAAAGAGTTGAACAAAG AAACTTCACGCTGGACTACTTATAGGGGCCCTGAGACCAACCCCCGGCCAGGCAGTTGCTCAGTGGGCCCCTCCT AATCTGGCGTGGAGTATACACGGCTTGCAGTGGAGACAGCCCAGGGCCTTGATGGGCACAGCCATCTTGTCATGT ACCTGGGAACCACCACGGGTCGCTCCACAAGGCTGTGGTAAGTGGGGACAGCAGTGCTCATCTGGTGGAAGAGA TCTCAGGAGGTGTCTGGAGGGTGCCCCGAGCCAACTGTAGTGTCTATGAGAGCTGTGTGGACTGTGTCCTTGCCC AGCAGGACATGGAGCGGGGGAACCCAGAGTGGGCATGTGCCAGTGGCCCCATGAGCAGGAGCCTTCGGCCTCAGA GCCGCCCGCAAATCATTAAAGAAGTCCTGGCTGTCCCTAACTCCATCCTGGAGCTCCCCTGCCCCACCTGTCAG CCTTGGCCTCTTATTATTGGAGTCATGGCCCAGCAGCAGTCCCAGAAGCCTCTTCCACTGTCTACAATGGCTCCC TCTTGCTGATAGTGCAGGATGGAGTTGGGGGTCTCTACCAGTGCTGGGCAACTGAGAATGGCTTTTCATACCCTG ATGTGAAGGTCCCGTTGACCAGGGTCAGTGGTGGGGCCCCCTGGCTGCCCAGCAGTCCTACTGGCCCCACTTTG TCACTGTCACTGTCCTCTTTGCCTTAGTGCTTTCAGGAGCCCTCATCATCCTCGTGGCCTCCCCATTGAGAGCAC TCCGGGCTCGGGGCAAGGTTCAGGGCTGTGAGACCCTGCGCCCTGGGGAGAAGGCCCCGTTAAGCAGAGAGCAAC ACCTCCAGTCTCCCAAGGAATGCAGGACCTCTGCCAGTGATGTGGACGCTGACAACAACTGCCTAGGCACTGAGG CCCTGACTAGGATGACAGCAGCACAAAAGACCACCTTTCTCCCCTGAGAGGAGCTTCTGCTACTCTGCATCACTG ATGACACTCAGCAGGGTGATGCACAGCAGTCTGCCTCCCCTATGGGACTCCCTTCTACCAAGCACATGAGCTCTC TAACAGGGTGGGGGCTACCCCCAGACCTGCTCCTACACTGATATTGAAGAACCTGGAGAGGATCCTTCAGTTCTG TAATGAACACCAAACATCTAAACAATCATATGCTAACATGCCACTCCTGGAAACTCCACTCTGAAGCTGCCGCTT GCTGACTCCCAGGAAGTCTTTCCTGAAGTCTGACCACCTTTCTTCTTGCTTCAGTTGGGGCAGACTCTGATCCCT TCTGCCCTGGCAGAATGGCAGGGGTAATCTGAGCCTTCTCACTCCTTTACCCTAGCTGACCCCTTCACCTCTCC GCTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

2518/2825 FIGURE 2235

MALPALGLDPWSLLGLFLFQLLQLLLPTTTAGGGGQGPMPRVRYYAGDERRALSFFHQKGLQDFDTLLLSGDGNT LYVGAREAILALDIQDPGVPRLKNMIPWPASDRKKSECAFKKKSNETQCFNFIRVLVSYNVTHLYTCGTFAFSPA CTFIELQDSYLLPISEDKVMEGKGQSPFDPAHKHTAVLVDGMLYSGTMNNFLGSEPILMRTLGSQPVLKTDNFLR WLHHDASFVAAIPSTQVVYFFFEETASEFDFFERLHTSRVARVCKNDVGGEKLLQKKWTTFLKAQLLCTQPGQLP FNVIRHAVLLPADSPTAPHIYAVFTSQWQVGGTRSSAVCAFSLLDIERVFKGKYKELNKETSRWTTYRGPETNPR PGSCSVGPSSDKALTFMKDHFLMDEQVVGTPLLVKSGVEYTRLAVETAQGLDGHSHLVMYLGTTTGSLHKAVVSG DSSAHLVEEIQLFPDPEPVRNLQLAPTQGAVFVGFSGGVWRVPRANCSVYESCVDCVLARDPHCAWDPESRTCCL LSAPNLNSWKQDMERGNPEWACASGPMSRSLRPQSRPQIIKEVLAVPNSILELPCPHLSALASYYWSHGPAAVPE ASSTVYNGSLLLIVQDGVGGLYQCWATENGFSYPVISYWVDSQDQTLALDPELAGIPREHVKVPLTRVSGGAALA AQQSYWPHFVTVTVLFALVLSGALIILVASPLRALRARGKVQGCETLRPGEKAPLSREQHLQSPKECRTSASDVD ADNNCLGTEVA

2519/2825 FIGURE **2236**

GTGCATGAGGGGGCTGCTCCGGAGCGACGGCGGCTGCAGCTGGAGCCAGGCGCTCGCCCGTCCGCCGGTTGGCTC GCCGGGACCTCGCCCCCGCGCGCAGAGTCCCTTGCGTGGATTGGCAAGCGACGCCCCACCTGCCCCGAGCTCAC CATTTTCTTTCGCGCTGGCTGACCCGGCGAAGGGAGCCGACCGGCCCTGGGCTGAGGTAAAACCCCA CGGAAAGAACATGAGGTTCCCTTGGAAATCATTCAAGAGGAAGATGGAAGGGGCTGTTTAGAAGAGCTTAAAAGC TACAGGCTGTAAGACTGGGGCCTGAGTGCTGGCAGTGGAAAACACTGTTGGGCTGTGATCTCTCCCTGAAAAGTT CCAGGTGCCTTTTTGCTTCCTGCAAAAGAAAGGAAGCGAAAGAGAGACCATGCCCATAGCCCTGAAGCAGGTAT TCAACAAGGACAAGACCTTCCGACCCAAGAGGAAATTTGAACCTGGCACAAGAGGTTTGAGCTGCACAAACGGG CTCAGGCATCCCTCAACTCGGGTGTGGACCTGAAGGCGGCTGTGCAGTTGCCCAGTGGGGAGGACCAGAATGACT GGGTGGCAGTACATGTGGTGGACTTCTTCAATCGGATCAACCTCATCTATGGCACCATCTGTGAGTTCTGCACCG AGCGGACCTGTCCTGTGATGTCAGGGGGCCCCAAATATGAGTATCGGTGGCAGGATGATCTCAAGTATAAGAAGC CAACAGCGCTGCCAGCTCCCCAGTACATGAACCTTCTTATGGATTGAGGTTCAGATCAACAACGAGGAAA TCCGGGTCTTTGTCCACGTCTATATCCACCACTTCGACCGGGTCATTGTGATGGGTGCAGAGGCCCATGTCAACA CCTGCTACAAACACTTCTATTACTTTGTCACAGAGATGAACCTCATAGACCGCAAGGAGCTAGAGCCTTTGAAAG AAATGACGAGCAGGATGTGTCAC**TAA**TGCTCCACCTCACCCTTTGGAAGAAAGGAAAGCTGTTTCCTCCTGGTGC CCTGAGCGGCAGGAGGTGGACCACCCTGGCTGAAATGACACACCTACTCCCAGGAACAGCAGAGGTGGAGGCAA GCAGTGACTCCTGAGAGACATTCCCCACTCACTTTGTGTGCTCTTAACCTTCTGAGTGCTGCTAGCCCAGACCTG GCCTCTGCGCTTCCACACATGGCACAGTTCTGCCTGTGACCTGCCGCCTAAGCTTTACTGGAATTCAGGTTTTGA GACTGAGATGCGTGTTCGTATTTTTCCACTTATCTGTCTTGTCAGCTGGCCGACTTCTCTGTGATTGGTTTTTTA AGCTCCTGCTCTGATCTGTGGTTTAACACTGTGCAGGGCTGTGGAGCTCTGAGAGCCCTGAACCCCTACCCATCC TGGGGTGGCTTGTCTCTCCCCCAAACAGGGTCTTCACGTTCTAACTGCAGGGAAGAGACTGGTTACTAGCGTAAA GCTGACAAGTTACCAGTTCACCTGATCAGAATGTATTTTTTATAACCACCATCATTCCTTGTCTCTTCAGTGGAA GATATTCTTTCCTGTTTCCCAGAAGAGAGAAATAAAAGTCCTAAATAACTAAGAATGATCAGCGGGAGCGTTGGG CATGATTACTGCAGTGTTTGTTCTTTATTAAAGACAGGGAGTCGTGGCTGTCTCTACATAATACTAACATTTCAG TGAAAAAGTACAGTTGGTTATTTGGTACGTGTAGATTTAACACCCAGACGGCTGACTTGTAACCCTCCCCACTA GCCTTCTGAGCATTTAAACCCAGCCGTCATTCTCTCCCCACTCCACGCTCCCACTCCTCTGCCACGTTATGTTA CGGCACAAAATTAATTTCTGCCCCTGTGATTGGGCCACGGTTGCCAAGGTAACAGTGGAGCTGGAGCTAACTTCC TTCTTTCATCCTTTCCAATTTTTCTATTCCAGAAGACAGTCAGAATAATGCATTCTGTACTACATCCTGCCTTTT GAAACCTAAATGAGTTTTCGTTGATGAAATGTTGCCTTCTCTGATTCACTACAAAACTGTGGTGGTTCTGACCA CCTGTGACGAGGGGGTCATAATACTTCCAGTGATCCTTTTAATTTTAGCAAAATATTTGTCGGTGGAGGGAAGTA GATAAGAATGTATTAGTGTATTTTAAAGTAATAATGATTAAAGAATAACTAAATGAC

2520/2825 FIGURE 2237

MSIALKQVFNKDKTFRPKRKFEPGTQRFELHKRAQASLNSGVDLKAAVQLPSGEDQNDWVAVHVVDFFNRINLIY GTICEFCTERTCPVMSGGPKYEYRWQDDLKYKKPTALPAPQYMNLLMDWIEVQINNEEIFPTCVGVPFPKNFLQI CKKILCRLFRVFVHVYIHHFDRVIVMGAEAHVNTCYKHFYYFVTEMNLIDRKELEPLKEMTSRMCH

2521/2825 FIGURE 2238

GGCACGAGGCTCTGGTGGCTAGCCTGTCCTGACAGGGGAGAGTTAAGCTCCCGTTCTCCACCGTGCCGGCTGGCC $\tt CGCCGCTCCTCTGCTGTCAGCGCCGGCAGCCCCTCCCGGGCTTCACTTCCTCCCGCAGCCCCTGCTACTGAGAAGC$ TCCGGGATCCCAGCAGCCGCCACGCCCTGGCCTCAGCCTGCGGGGCTCCAGTCAGGCCAACACCGACGCGCAGCT GATGACCTCACCCTCCAGCTCTCCAGTTTTCAGGTTGGAGACATTAGATGGAGGCCCAAGAAGATGGCTCTGAGGC GGACAGAGGAAAGCTGGATTTTGGGAGCGGGCTGCCTCCCATGGAGTCACAGTTCCAGGGCGAGGACCGGAAATT CGCCCTCAGATAAGAGTCAACCTCAACTACCGAAAGGGAACAGGTGCCAGTCAGCCGGATCCAAACCGATTTGA GACCAGCAAGTACCTCACCGACTCGGAATACACAGAGGGCTCCACAGGTAAGACGTGCCTGATGAAGGCTGTGCT GAACCTTAAGGACGGAGTCAATGCCTGCATTCTGCCACTGCTGCAGATCGACAGGGACTCTGGCAATCCTCAGCC CCTGGTAAATGCCCAGTGCACAGATGACTATTACCGAGGCCACAGCGCTCTGCACATCGCCATTGAGAAGAGGAG TCTGCAGTGTGTAAGCTCCTGGTGGAGAATGGGGCCCAATGTGCATGCCCGGGCCTGCGGCCGCTTCTTCCAGAA GGGCCAAGGGACTTGCTTTTATTTCGGTGAGCTACCCCTCTCTTTGGCCGCTTGCACCAAGCAGTGGGATGTGGT AAGCTACCTCCTGGAGAACCCACACCAGCCCGCCAGCCTGCAGGCCACTGACTCCCAGGGCAACACAGTCCTGCA TGCCCTAGTGATGATCTCGGACAACTCAGCTGAGAACATTGCACTGGTGACCAGCATGTATGATGGGCTCCTCCA AGCTGGGGCCCGCCTCTGCCCTACCGTGCAGCTTGAGGACATCCGCAACCTGCAGGATCTCACGCCTCTGAAGCT GGAGAACTCAGTGCTGGAGATCATTGCCTTTCATTGCAAGAGCCCGCACCGAACACCGAATGGTCGTTTTGGAGCC CCTGAACAAACTGCTGCAGGCGAAATGGGATCTGCTCATCCCCAAGTTCTTCTTAAACTTCCTGTGTAATCTGAT CTACATGTTCATCTTCACCGCTGTTGCCTACCATCAGCCTACCCTGAAGAAGCAGGCCGCCCTCACCTGAAAGC GGAGGTTGGAAACTCCATGCTGCTGACGGGCCACATCCTTATCCTGCTAGGGGGGATCTACCTCCTCGTGGGCCA GCTGTGGTACTTCTGGCGCGCCCACGTGTTCATCTGGATCTCGTTCATAGACAGCTACTTTGAAATCCTCTTCCT GTTCCAGGCCCTGCTCACAGTGGTGTCCCAGGTGCTGTTTTCCTGGCCATCGAGTGGTACCTGCCCCTGCTTGT GTCTGCGCTGGTGCTGGCTGGACCTGCTTTACTATACACGTGGCTTCCAGCACACAGGCATCTACAGTGT TGTAGCCCTGGTGAGCCTGAGCCAGGAGGCTTGGCGCCCCGAAGCTCCTACAGGCCCCAATGCCACAGAGTCAGT GCAGCCCATGGAGGGACAGGAGGACGAGGGCAACGGGGCCCAGTACAGGGGTATCCTGGAAGCCTCCTTGGAGCT $\verb|CTTCAAATTCACCATCGGCATGGGCGAGCTGGCCTTCCAGGAGCAGCTGCACTTCCGCGGCATGGTGCTGCTGCT| \\$ GCTGCTGGCCTACGTGCTCACCTACATCCTGCTGCTCAACATGCTCATCGCCCTCATGAGCGAGACCGTCAA CAGTGTCGCCACTGACAGCTGGAGCATCTGGAAGCTGCAGAAAGCCATCTCTGTCCTGGAGATGGAGAATGGCTA TTGGTGGTGCAGGAAGAAGCAGCGGGCAGGTGTGATGCTGACCGTTGGCACTAAGCCAGATGGCAGCCCCGATGA GCGCTGGTGCTTCAGGGTGGAGGAGGTGAACTGGGCTTCATGGGAGCAGACGCTGCCTACGCTGTGTGAGGACCC GTCAGGGGCAGGTGTCCCTCGAACTCTCGAGAACCCTGTCCTGGCTTCCCCTCCCAAGGAGGATGAGGATGGTGC CTCTGAGGAAAACTATGTGCCCGTCCAGCTCCTCCAGTCCAAC<u>TGA</u>TGGCCCAGATGCAGCAGGAGGCCAGAGGA CAGAGCAGAGGATCTTTCCAACCACATCTGCTGGCTCTGGGGTCCCAGTGAATTCTGGTGGCAAATATATTTT CACTAACTAAAAAAAAAAAAAAAAAAAAAAAA

2522/2825 FIGURE 2239

MTSPSSSPVFRLETLDGGQEDGSEADRGKLDFGSGLPPMESQFQGEDRKFAPQIRVNLNYRKGTGASQPDPNRFD RDRLFNAVSRGVPEDLAGLPEYLSKTSKYLTDSEYTEGSTGKTCLMKAVLNLKDGVNACILPLLQIDRDSGNPQP LVNAQCTDDYYRGHSALHIAIEKRSLQCVKLLVENGANVHARACGRFFQKGQGTCFYFGELPLSLAACTKQWDVV SYLLENPHQPASLQATDSQGNTVLHALVMISDNSAENIALVTSMYDGLLQAGARLCPTVQLEDIRNLQDLTPLKL AAKEGKIEIFRHILQREFSGLSHLSRKFTEWCYGPVRVSLYDLASVDSCEENSVLEIIAFHCKSPHRHRMVVLEP LNKLLQAKWDLLIPKFFLNFLCNLIYMFIFTAVAYHQPTLKKQAAPHLKAEVGNSMLLTGHILILLGGIYLLVGQ LWYFWRRHVFIWISFIDSYFEILFLFQALLTVVSQVLCFLAIEWYLPLLVSALVLGWLNLLYYTRGFQHTGIYSV MIQKVILRDLLRFLLIYLVFLFGFAVALVSLSQEAWRPEAPTGPNATESVQPMEGQEDEGNGAQYRGILEASLEL FKFTIGMGELAFQEQLHFRGMVLLLLLAYVLLTYILLLNMLIALMSETVNSVATDSWSIWKLQKAISVLEMENGY WWCRKKQRAGVMLTVGTKPDGSPDERWCFRVEEVNWASWEQTLPTLCEDPSGAGVPRTLENPVLASPPKEDEDGA SEENYVPVQLLQSN

2523/2825 FIGURE **2240**

GCGCGA**ATC**GGCAGAGCAGAACTTCTAGAAGGGAAGATGAGCACCCAGGATCCCTCAGATCTGTGGAGCAGATCC GATGGAGGGCTGAGCTCCAGGACTTGGGGTGGTATCACGGCAACCTCACACGCCATGCTGCTGAAGCTCTT GTGAGGGCCAAAGATTCTGTTAAACACTTTCATGTTGAATATACTGGATATTCATTTAAATTTGGCTTTAATGAA TTCTCATCTTTGAAGGATTTTGTCAAGCATTTTGCAAATCAGCCTTTGATTGGAAGCGAGACAGGCACTCTGATG GTTCTAAAACATCCCTACCCAAGAAAAGTGGAAGAACCCTCCATTTATGAATCTGTCCGGGTTCACACAGCAATG CAGACAGGAAGAACAGAAGATGACCTTGTGCCCACAGCACCTTCTCTGGGCACCAAAGAAGGTTACCTCACCAAA CAGGGAGGCCTGGTCAAGACCTGGAAAACAAGATGGTTTACTCTGCACAGGAATGAACTGAAATACTTCAAAGAC CAGATGTCACCAGAACCAATTCGGATCCTAGACCTAACAGAATGTTCAGCTGTACAATTCGATTATTCACAAGAA AGGGTAAACTGTTTTTGTTTGGTATTTCCATTCAGGACATTTTATCTCTGTGCAAAGACCGGAGTAGAAGCTGAT GAGTGGATCAAGATATTACGCTGGAAATTGGTCAAGGACAAAAGCTGTATTTTGTCTGCTCTCTGTATATCTCCC TTAAATAGATCTTTCTTGCCAAGGAATGCTCTGGCCCAGGAGCAAGGTGGAATGTTTCCCTGACGCTGTGATCTG ATATACCACGTTGCTGACTCACGTTGCCCCTTCCATGATGTTGCCATCTCCTTGAGAACACTGAAGCAATCAC CATTCTGATAGAAAGTGCTTAAACCACCACTCTTAGGTCTGCTCACTCTTAGAACACACAATGGAAGAGGAAGGG TTTTTGTTTTCACTCATTGTGGTCCCCAAGCCTATTGACACTAGTTGCCTAGAGTCCCACTGTGAGTCATGGTCA GCCTGTCTGACATCCAGGTTGTGCTATTAACCAAGAAGGAAACAGATACTTGGAGGCTTAGATGACTTCTGCAGG ATTTGGCAGGTCCTTTGCTTCTAATGACAAAACTGTGAGAGCTAGATGTCCTATGGCCAATTAGGTAGTATAATA AAGGTAAATGAAGGTACAATTTTTAAACCATTATTTTCACCCTGTTGGGGTAAATGTTTTAAAGAGTGAGAAAAC ATAAATTGAGAAAGGGTGATAAAGTAATAGATAACTTTTAGTTTAATAATAATTATTGTTATTATACTACTAATA AGTGTATTATAACAATCCCTTTCCCAGAATTAGTTGTATAGGGTTGGCCCAAGAGATGTAAGAAAAATCTCGCAT TGCTCCCTAAGCACCCTGGGCCTTATTAAAGAGCAACTTCTATTTCCAGTCGGGGGAGTAACACTAAAGCTACAA GAAATATGTAATAATGATAGGTAATAATGTGTTCCAAAGCTTTTTCAAACTAGAATAAGGAGGCAAATAGAAGAA TGAGATACTGATGTCCACAGTTCATTGGCAGAATCTAACCCCTTCTGTTATCTTTTTTAATACTATTTTTGTTTA GATAGAAGTTTCAAAGAAGATAAAAATGCTTGAAGAGCCTGAGAGTAAAAAGATTATGCTGCAAAGCTATGATAT AAACTGCTCTTGCAGTCCAAAGGGATACCTGATTAAAGAAGTTTCTTATTTAAACATCTCAGACGCAAAAATTAC ATTAAATTTTTGTATATTTCAACAACATTTTAAATGTATTTTGTTATGTTTTGTATTATATAGGATAAAGCAAATG TCAAGTTAAAATGTATTGTGTTGTTTGTAAAGTAAGAAGTTACTGGCCAGGAGCGGCGGCTCATGCCTGTAATCC CAGGACTTTGGTAGGCCAAGACAAGCAGATCACTTGAGGTCAGGAGTTCAACATCAGCCTGGCCAACATGATGAA ACCTTGTCTTTACTAAAAATACAAAAATTAGCTGGGCATGGTGGCAGGCGCCTGTAATCCCAGCTACTCAGGAGG $\tt CTGAGGCAGGAGATTGCTTGAACCCGGGAGGTTGGAGGTTGCAGTGAACCAAGATCGCGGCGCTGCACTCTAGCC$ ATTTTGCTGTGCATGTACCATTTTG

2524/2825 FIGURE 2241

 $\label{thm:composition} MGRAELLEGKMSTQDPSDLWSRSDGEAELLQDLGWYHGNLTRHAAEALLLSNGCDGSYLLRDSNETTGLYSLSVR\\ AKDSVKHFHVEYTGYSFKFGFNEFSSLKDFVKHFANQPLIGSETGTLMVLKHPYPRKVEEPSIYESVRVHTAMQT\\ GRTEDDLVPTAPSLGTKEGYLTKQGGLVKTWKTRWFTLHRNELKYFKDQMSPEPIRILDLTECSAVQFDYSQERV\\ NCFCLVFPFRTFYLCAKTGVEADEWIKILRWKLVKDKSCILSALCISPEEKTDHK$

2525/2825 FIGURE 2242A

AAGGAGAGCTTTTCCTGCACAAGGAACGCCTCGTGGGGAGACCCAAGGCAGGAGCGGTCCGGAGCCGGCTGCG GCGTGTGCGGCCGGCCTTGGGACAGCGATCGCCGCGGGTGGCAACAGAGAGCCCCAAGCAAAAGTGGGAGCAGGA ${\tt GCTTGGAGGTGAGCACAGGAAGCCCCACTTGAGGCTTTTACGCAGCCTCTAGTCTCTGTTTCTTCTGGAATAGGC}$ AAGCGTCCTTTCAACTCTAAGAGACCAGCAGAGGCCACTGTCCCTTAAGACTGCCGGAGTCCTCACCACTTCTCC $\tt CCCAGCGTCTCTGTCCACCCCAGCAGTTCGGCCCACCCCAGTGCCTTAGCCCAACCCAGTGGCTTGGCTCACCCCAGTGCCTTAGCCCAGCCCAGTGGCTTGGCTCACCCCAGTGCCTTAGCCCAGTGGCTTGGCTCACCCCAGTGCCTTAGCCCAGTGGCTTGGCTCACCCCAGTGCCTTAGCCCAGTGGCTTGGCTCACCCCAGTGCCTTAGCCCAACCCAGTGGCTTGGCTCACCCCAGTGCCTTAGCCCAACCCCAGTGGCTTGGCTCACCCCAGTGCCTTAGCCCAACCCCAGTGGCTTGGCTTGGCTCACCCCAGTGCCTTAGCCCAACCCCAGTGGCTTGGCTTGGCTCACCCCAGTGCCTTAGCCCAACCCCAGTGGCTTGGCTTGGCTCACCCCCAGTGCCTTAGCCCAACCCCAGTGGCTTGGCTTGGCTCACCCCCAGTGCCTTAGCCCCAACCCCAGTGGCTTGGCTTGGCTTGGCTCACCCCCAGTGCCTTAGCCCAACCCCAGTGGCTTGGCTTGGCTTGGCTTGGCTCACCCCAGTGCCTTAGCCCCAACCCCAGTGCCTTAGCCCAACCCCAGTGGCTCAGTGGCT$ AGTAGCTCGGGCCCTGAGGACCTCAGCGTGATCAAGGTGAGCAGGCGCCGTTGGGCCGTGGTCCTGGTGTTTAGC TGCTACTCCATGTGCAACTCCTTTCAGTGGATCCAGTACGGCTCCATCAATAACATCTTCATGCACTTCTACGGT GTCAGTGCCTTTGCCATTGACTGCTGTCCATGTGCTACATGCTGACTTACATCCCTCTGCTCCTGCCAGTGGCT TGGCTGCTGGAGAAGTTCGGCCTGCGCACCATTGCTCTCACTGGCTCGGCTCTCAACTGCCTGGGGGCCTGGGTG AAGCTGGGCAGCCTGAAGCCGCATCTCTTTCCGGTCACCGTAGTGGGCCAGCTCATCTGCTCTGTGGCCCAGGTT TTCATCCTGGGCATGCCTCCCGCATCGCTTCCGTCTGGTTCGGGGCTAATGAGGTTTCAACAGCCTGCTCGGTG GCTGTCTTTGGCAATCAGCTTGGAATTGCGATTGGGTTCTTGGTCCCTCTGTTTTGGTACCCAACATTGAAGAC CGGGACGAGCTTGCCTACCACATCAGCATCATGTTCTATATAATAGGAGGTGTGGCCACTCTCCTCCTCATCCTT GTCATCATTGTGTTCAAGGAGAAACCTAAATATCCCCCCAGCAGGGCCCAATCCCTGAGCTATGCCTTGACCTCT CCTGATGCCTCATACTTAGGTTCCATCGCCCGGCTCTTCAAAAATCTCAACTTTGTGCTGCTTGTCATCACCTAT GGTCTGAATGCTGGTGCTTTTTATGCCTTGTCCACTCTTCTGAATCGCATGGTGATCTGGCACTACCCGGGGGAA GAAGTGAATGCTGGAAGAATTGGCCTGACGATCGTCATTGCAGGAATGCTTGGGGCTGTGATCTCAGGAATCTGG CTGGATAGGTCCAAAACCTACAAAGAGACAACCCTGGTAGTCTATATCATGACACTGGTGGGCATGGTGGTGTAC ACGTTTACCTTGAACCTGGGACACCTGTGGGTAGTGTTCATCACTGCTGGCACAATGGGCTTCTTTATGACTGGC TATCTCCCACTGGGATTTGAGTTTGCTGTGGAGCTCACGTACCCAGAATCAGAAGGCATCTCCTTCGGCCTCCTC AACATATCTGCACAGGTATTTGGGATCATCTTTACCATCTCCCAGGGCCAGATTATTGACAACTATGGAACCAAG AGACAGAAAGCAAACAAAGAAACTCTTGAGAACAAACTCCAAGAGGAGGAGGAGGAGAGCAACACCAGCAAAGTG $\tt CCCACTGCTGTGTCAGAGGATCATCTC{\color{red}{\textbf{T}}}{\color{blue}{\textbf{C}}}}{\color{blue}{\textbf{C}}{\color{blue}{\textbf{C}}}{\color{blu$ CCTTCAGCACAGCTCTCACCGCCAGCACAAAGGGCTTCGCTAGAGATGTTTTTGGAGGGAATCAGTGGGACTATT TGTGGCATGGATGGCCTATTCCTCCTAGAACCCACGTAAGAGCTTGGATGATTTAGTTGGAGAAAATTGCACCTA TCACCAAATGCAAATTTGATTCCCACCTCCACCCCTTTTAGGTTATGGGAGTTGGTGTTTGGGACAGGGTGGCAG AAATTTTCACAGGAAGAAGCCTATTCAGGATATTAACTTGAAATTTCCAGTGTCCTAAGAGCCTCTCATGAAGC CCAGTTCTAATAAGTGGCAAGCTGCTCTGCCGGGGTCATCTCCTGGGTCATCGGACTGATTGCTCAAGTTCTGCA GGAGAGGAAGCACCATTAGAACAACTCCATCAGAACAGCTCCACCGGGACTTGTGGGCCTAAATTTTCCTGGCCT TATATTTGTGAAAGCACATATTTGGGAACTCTGGTAGCTTGAGTTGGGAATGGGAAGGTTCTTTTTTACAGAAGT ACTTCCCCAGGGACTTCTGTGTGTCACAGTCACCTCTGATGCCTTTATCTTGATGTTGCATTGGGAATCTCAGCC ATCAGCCCAAGTGCTTGTTTTATTCCAAGGCAGGGTAATCCCCGTCAACTTACTCTAACCTTTGCTGAAAACTAA TCTTGATTCATTCTACTCTGAAAATCCAAAGGTGCTTCTGAGAGATAAGAGGGAAGGGGTAGAAGGAAAGGTGCC CCTTGAAATGGGAATTGAGCCTGTTAGAATTAAAAGCTTATCTCACCTCTGCTGGGGACAGTATTTGCACCACCA ACCCCTCTCCTCACCTGCTTTGAGCGATAATCTTTATCAGATATTCTAAACTTAAAGGGATTCCCTTTAAACCAA $\verb|CTCAAGCTGATCTTTCCTATCTAGCCTGCTGTTTTGGCTGTACTCATGGGCTTTTGGTAATATCTCCTAAAAATGAG|$ GTTTTGGTAATTTTTCCTATGCATTGGGCAACTGTGATCGTGACCACTGTGCTGTCTTGCTCCAGCCACTGCCCT GGCCTCAGCATATCAGGGCAGCCTGTGCTGCTGCAATACTGTGGTGCTTGGGCCACTGCCTGAGAGGAGCCAGG TTTGTGTGTGTCTGCATGTGTGTGTGTGTTTTTGTACAGATTCAAGCAATGCAAGGAACATGCTGTATG TAATAGAAGAAGAAGTCCACGTTTTCGGCAGAAGTAGTGAGTCAGTGTGGAAGAGAGGTGAGGTGTGCTTTAC TTTTTGATAAAGAGAAGATGTTTACTCATAAACCCTTCAAAAGGTATTAACAAATGTTTACCAAAACCTATTGCT TTATTTTAAAAACATAATTTGTGTTTTCTATTTGTAAGATCTGACATTTCGAGGCCAATAAAAACTTCTCAGAAA

2526/2825 FIGURE 2242B

AAAAAAAAAAAA

2527/2825 FIGURE 2243

MVNEGPNQEESDDTPAPESALQADPSVSVHPSVSVHPSVSINPSVSVHPSSSAHPSALAQPSGLAHPSSSGPEDL SVIKVSRRRWAVVLVFSCYSMCNSFQWIQYGSINNIFMHFYGVSAFAIDWLSMCYMLTYIPLLLPVAWLLEKFGL RTIALTGSALNCLGAWVKLGSLKPHLFPVTVVGQLICSVAQVFILGMPSRIASVWFGANEVSTACSVAVFGNQLG IAIGFLVPPVLVPNIEDRDELAYHISIMFYIIGGVATLLLILVIIVFKEKPKYPPSRAQSLSYALTSPDASYLGS IARLFKNLNFVLLVITYGLNAGAFYALSTLLNRMVIWHYPGEEVNAGRIGLTIVIAGMLGAVISGIWLDRSKTYK ETTLVVYIMTLVGMVVYTFTLNLGHLWVVFITAGTMGFFMTGYLPLGFEFAVELTYPESEGISFGLLNISAQVFG IIFTISQGQIIDNYGTKPGNIFLCVFLTLGAALTAFIKADLRRQKANKETLENKLQEEEEESNTSKVPTAVSEDH L

2528/2825 FIGURE **2244**

ATGGAAGTCTCCAAAAGCAGTAGCCAAGAAAAAAATGGAAAAGGGGAAGTAATAATACCCAAAGAGAAGTTCTGG AGCATGCTGACCAACCAGACGGGGGGGGGCGGCCTCTCCAATATAAGCCATCTGAACTACTGCGAACCTGAC CTGAGGGTCACGTCGGTGGTTACGGGTTTTAACAACTTGCCGGACAGATTTAAAGACTTTCTGCTGTATTTGAGA TGCCGCAATTATTCACTGCTTATAGATCAGCCGGATAAGTGTGCAAAGAAACCTTTCTTGTTGCTGGCGATTAAG TCCCTCACTCCACATTTTGCCAGAAGGCAAGCAATCCGGGAATCCTGGGGCCAAGAAAGCAACGCAGGGAACCAA ACGGTGGTGCGAGTCTTCCTGCTGGGCCAGACACCCCCAGAGGACAACCACCCCGACCTTTCAGATATGCTGAAA TTTGAGAGTGAGAAGCACCAAGACATTCTTATGTGGAACTACAGAGACACTTTCTTCAACTTGTCTCTGAAGGAA GTGAACACCCATCACATCCTGAATTACTTGAATAGTTTATCCAAGACCAAAGCCAAAGATCTCTTCATAGGTGAT GTGATCCACAATGCTGGACCTCATCGGGATAAGAAGCTGAAGTACTACATCCCAGAAGTTGTTTACTCTGGCCTC TACCCACCTATGCAGGGGGGGGGGTTCCTCTACTCCGGCCACCTGGCCCTGAGGCTGTACCATATCACTGAC CAGGTCCATCTACCCCATTGATGACGTTTATACTGGAATGTGCCTTCAGAAACTCGGCCTCGTTCCAGAGAAA GTACATAGTAGAAAACCTCAAGAGATGATTGATATTTGGTCTCAGTTGCAGAGTGCTCATTTAAAATGCTAA

2529/2825 FIGURE 2245

MSVGRRRIKLLLGILMMANVFIYFIMEVSKSSSQEKNGKGEVIIPKEKFWKISTPPEAYWNREQEKLNRQYNPIL SMLTNQTGEAGRLSNISHLNYCEPDLRVTSVVTGFNNLPDRFKDFLLYLRCRNYSLLIDQPDKCAKKPFLLLAIK SLTPHFARRQAIRESWGQESNAGNQTVVRVFLLGQTPPEDNHPDLSDMLKFESEKHQDILMWNYRDTFFNLSLKE VLFLRWVSTSCPDTEFVFKGDDDVFVNTHHILNYLNSLSKTKAKDLFIGDVIHNAGPHRDKKLKYYIPEVVYSGL YPPYAGGGGFLYSGHLALRLYHITDQVHLYPIDDVYTGMCLQKLGLVPEKHKGFRTFDIEEKNKNNICSYVDLML VHSRKPQEMIDIWSQLQSAHLKC

2530/2825 FIGURE 2246A

GTTTGAGGCCGGCCAGTCGTGACTGGGCGGCAATGAGGTCAGTGACTGCCGGGAGTCCTGCAGGGGCGGGGCGGC GCCAAGCGCAGGGAGCCCGGCTGAGTGGCAGCCYAGATTGAAGATGGATACGTGACAATCCCAGGGACCGCTGCA CTGACTTCATTTCCTTAGACAAGACACAGTGTAGGGCCCGGCCCGYGTTGGCCCCAGGACTCCTTTGGAATATAG ATCCGCTCCACGCTGATGGTCGCYGGCTTTGTCTTCTACTTGGGCGTCTTTGTGGTCTGCCACCAGCTGTCCTCT $\verb|TTTGGTGTTCAGAGCACAGCCGCAGGCCTGTGGGGGCTCTGCTGGGGGGACCCTGTGCTGCATGCCGACAAGGCGCGT|$ GGCCAGCAGAACTGGTGCTGGTTTCACATCACGACAGCAACGGGATTCTTTTGCTTTGAAAATGTTGCAGTCCAC $\tt CTGTCCAACTTGATCTTCCGGACATTTGACTTGTTTCTGGTTATCCACCATCTCTTTGCCTTTCTTGGGTTTCTT$ GGCTGCTTGGTCAATCTCCAAGTTGGCCACTATCTAGCTATGACCACGTTGCTCCTGGAGATGAGTACGCCCTTT ACCTGCGTTTCCTGGATGCTCTTAAAGGCGGGCTGGTCCGAGTCTCTGTTTTGGAAGCTCAACCAGTGGCTGATG ATTCACATGTTTCACTGCCGCATGGTTCTAACCTACCACATGTGGTGGTGTTTTCTGGCACTGGGACGGCCTG GTCAGCAACCTGTATCTGCCTCATTTGACACTGTTCCTTGTCGGACTGGCTCTGCTTACGCTAATCATTAATCCA TATTGGACCCATAAGAAGACTCAGCAGCTTCTCAATCCGGTGGACTTGGAACTTCGCACAGCCAGAAGCCAAGAGC AGGCCAGAAGGCAACGGGCAGCTGCTGCGGAAGAAGAGGCCATAGCTGCTCCAGCCGGGGCTCCGGGGCCGCAGC AGAGCTGGCACACCGATTCTGGGAAGCCCCGCGAATGATGGCTTTTGAATTAATGAGGCAGTGAATGTTTTGTGT TTACTTCTAAGGGAAATACTAACTTTCTTTCGCATTAGTATTAATTTTGAAGTAGCTACAAAGTATTTTTAAGAA ATTATAATTTTATGACTGTCTGGCAGGCTCTGTCAGTTTAGCCGCGCCGGACCGTGTCAAGCATCTAGGAGAGAA GTCCATGGTGTCCAGGCATCGGGGCGTCACACCTGTTGAGGAGTGGGGTGGCTTTGAATGCTGGAAATGGCTTCA TAGTGAAGTGCCTCCCACAGGGCGGGTGGGTCAGCGTTGACTCTTTCCARCTGCACACTCATATGCCGTGTGTCT TATTCAGAAGTCACATTCTTTTCAGTTGGAGAGAATTGGGCTAAGATAGAAAATAACATGATTTGTTCCTTATTA CGAGGCAGGTGGATCACTTGAGGCCAGGAGTTCGAGACCAGCCTGGTCAAGATGGTGAAACCCCATCTCTACTAA AATTACAAAAATTAGCCGGGTGTCGTGGCACACCCTGTAATCCCAGCTATTTGGGAGGCCAAGGCAGGAGAATT GCCTGAACCCGGGAGGCGGAGGTTGCAGTGAGCTGAGATCGCACCACTGCACTCCAGCACTCCAGCCTGGGTGAC AGAGCAAGACTCTCTCATAAAAAAAAAAAAAAAAAAATTCTAGACCGAAGTGTACGGCAGTGCCATCTGGTG GCAAGTGGTACAAAGACAACGCTGAGGGGTAGTGACTCCTGTAGCAGCAGAGACGCCTTGGAGTTTAACCCCCAC ATGAGAAGTTATTATTCATACTGTGTTGCTCATTTGACAAAATAAGGTAAGGATTTCATAATCAGGTTGTCTGGG CTCGACTGCAGGGTCCTGGGGTCCCTAGAGTGGTCCTGCAGCAGCCCCTGGCAATGAGCTGCCTGATGATGAGTC CCAAGGTACATTGTTCTACTGTTTTATACCCAGGTAGAAGTTACACAGCAATTTAGCAATGTTGTTAACAGACAT AGTTTATTTTTTATCACAAGCACCTTTGAAATGTACGTGGAAAACGTCGGCTGCTCGTGAGAATCATGTGTGACT ACGGAGCCTGGCTTTGGCTCCCAGGCTGGAGTCCAGTGGTGTGATCTCGGCTCACTGCAACCTCCACCTCCCGGG TTCCAGGGATTCTCCTGCCTCACCCTTTCAAGTAGCTGGGATTRCAGGTACCTCTACCATGCCTGGCTGATTTTT TGTATTTTTAGTAGAGACAGGGTTTCACCATGTTGGCCAGGCTGGTCTCTGACTCTGACTAAAAGTGATCTGCC CACCTCGGCCTCCCAAAGTTCTGGGATTACGGGCGTGAGCCACTTCACCCGGCCCGGAGCGGTGTATTTTGATTG CTGGTGCTTTAACTATTTGACCAAGGTGTATAGTAACCTATTTATCACATTTTACGAAGCAATTTTAATCTTAA CRGAACCCAAATGATGTCTTCCTCTCTCAAAATAAACTAACCTATTCATATTGCTGTGAATGCTTTATCTTGG AGATAGAAAATATAATGATAAATTCATCATGTGTTCAGAATTCGATTTGGAGTTGGAAGTGGACAGCCTAATTTT TATCTCACCTCCACTAGGACTTTGACCTTCCCAGGGGTCCACACTTTACCTCCTGTATCTTCATACGCGTGTGTG GGGGACCCCTCAGTGCAGAGCCTGAAGTTGGGGGTTTAGGGGTGGAAAAGGCTTCGTGAAATGTTAATGATGCGT

2531/2825 FIGURE **2246B**

ACACCTTCCAGATGGCACAGCACTTTCCCATGGTCCTCRCTGGCCTCAGTCTCCCTGACCGGCAGTGTGAGGGGA GGCCCGGCCCACTCAGCGGCCCACATTGGCCAGCATTCAGCTGCACGTGTGTGCTGCGTGCTTCACATCCTCTAT ${\tt TGAGAGTTACAGCAAGTGTTAAACGAGGTGAGTTYACATAACAGGAATTCTGGAACTGCTTGAAAACTAGGACGA}$ GTGGCTCTCCAGCTTGGCTTCAGTGTGATCACTTGTCAGTGCGCTTTCTCTTTTCGATAGTGAAATCCTTCTCTAT ACCTATGTTTTGTTGCTCGACGTTGGGAAACAGAATGGGCCAGGGAGGTTGAGTGACTGAAGACCAAGGG TTGGTGCAGCCTCCTCGCCGCGCGCGCGCGCGCCCCCTCTCTCGCCCTTCTCGGTGTCCAGGCTCCTT GGGTGATGCTGGAGTTGTCATGGCYGCAGTTCAGTGTGAGATTTTTTACCAGGTATTGCGCTTAAGGGACATGAT TTTCCATTTTCTTCGCCCGGACAACTTGAATGAAATGGGCACTGTTGATTCCACTTCTGTCGAGGAGCTTCGGGG CTCAGAGAGGTGATGACGTGCCCAAGGTGACGCAACTCGTGAACAGCCGTGCCTTGGGCGCAGCTCCGGCG CCAGAGCTGGGCTCTTCAACACGGCATTTAGCGCAGAAAGTCGTGGTTCAGGCAGTATGGGCCGCTGTGACAAAA CACCTAAGACTGGGTAGTTTATAAAGAACAGACATTCAGGCCAGGCACGGTGACTCACGCCTGTAATCCCAGCAC TTTGGGAGGCCGAGGCGTGGATCATTTGAGGTCAGGAGTTTGAAACCAGCCTGGCCAACATGGTGAAACCCCA TCTCTACTAAAAAAACTAGCTGGGGGTGGTGGTGTATGCCTGTGGTCCCAGCTACTTGGGAGGCTAAGGT AGAAGAATTGCTTGAACCTGGGAGGCAGAGATTGCAGTGAGCCGAGATCACGCCATTGCACTCCAGCCTGGGTGA CACAGTGAGACTCCATCKCAAAAA

2532/2825 FIGURE **2247**

MNPASDGGTSESIFDLDYASWGIRSTLMVAGFVFYLGVFVVCHQLSSSLNATYRSLVAREKVFWDLAATRAVFGV QSTAAGLWALLGDPVLHADKARGQQNWCWFHITTATGFFCFENVAVHLSNLIFRTFDLFLVIHHLFAFLGFLGCL VNLQVGHYLAMTTLLLEMSTPFTCVSWMLLKAGWSESLFWKLNQWLMIHMFHCRMVLTYHMWWVCFWHWDGLVSN LYLPHLTLFLVGLALLTLIINPYWTHKKTQQLLNPVDWNFAQPEAKSRPEGNGQLLRKKRP

2533/2825 FIGURE **2248**

 $\verb|CTACTGCCATGGAACTTCTTTATCACTGCCAAGGAGTACTGGATGTTCAAACTCCGCAACTCCTCCAGCCCAGCC| \\$ ACCGGGGAGGACCCTGAGGGCTCAGACATCCTGAACTACTTTGAGAGCTACCTTGCCGTTGCCTCCGCCGTGCCC TCCATGCTGTGCCTGGTGGCCAACTTCCTGCTTGTCAACAGGGTTGCAGTCCACATCCGTGTCCTGGCCTCACTG ACGGTCATCCTGGCCATCTTCATGGTGATAACTGCACTGGTGAAGGTGGACACTTCCTCCTGGACCCGTGGCTTT TTTGCGGTCACCATTGTCTGCATGGTGATCCTCAGCGGTGCCTCCACTGTCTTCAGCAGCAGCATCTACGGCATG ACCGGCTCCTTTCCTATGAGGAACTCCCAGGCACTGATATCAGGAGGAGCCATGGGCGGGACGGTCAGCCCGTG GCCTCATTGGTGGACTTGCCTGCATCCAGTGATGTGAGGAACAGCGCCCTGGCCTTCTTCCTGACGGCCACCATC TTCCTCGTGCTCTGCATGGGACTCTACCTGCTGCTGTCCAGGCTGGAGTATGCCAGGTACTACATGAGGCCTGTT CTTGCGGCCCATGTGTTTTCTGGTGAAGAGGAGCTTCCCCAGGACTCCCTCAGTGCCCCTTCGGTGGCCTCCAGA TTCATTGATTCCCACACCCCCTCTCCGCCCCATCCTGAAGAAGACGGCCAGCCTGGGCTTCTGTGTCACCTAC GTCTTCTTCATCACCAGCCTCATCTACCCCGCCGTCTGCACCAACATCGAGTCCCTCAACAAGGGCTCGGGCTCA CTGTGGACCACCAAGTTTTTCATCCCCCTCACTACCTTCCTCCTGTACAACTTTGCTGACCTATGTGGCCGGCAG ATCCCCCTCTTCGTGCTCTGTAACTACCAGCCCGGGTCCACCTGAAGACTGTGGTCTTCCAGTCCGATGTGTAC $\tt CCCGCACTCCTCAGCTCCTGCTGGGGCTCAGCAACGGCTACCTCAGCACCCTGGCCCTCTCTACGGGCCTAAG$ ${\tt TCAGCCTGCTCTGGTGCACCTCATC} {\tt TAG} {\tt AAGGGAGGACATAGGACATTGGTGCTTCAGAGCCTTTG}$ AAGATGAGAAGAGTGCAGGAGGGCTGGGGGCCATGGAGGAAAGGCCTAAAGTTTCACTTGGGGACAGAGAGCA GAGCACACTCGGGCCTCATCCCTCCCAAGATGCCAGTGAGCCACGTCCATGCCCATTCCGTGCAAGGCAGATATT CCAGTCATATTAACAGAACACTCCTGAGACAGTTGAAGAAGAAATAGCACAAATCAGGGGTACTCCCTTCACAGC TGATGGTTAACATTCCACCTTCTTTCTAGCCCTTCAAAGATGCTGCCAGTGTTCGCCCTAGAGTTATTACAAAGC CAGTGCCAAAACCCAGCCATGGGCTCTTTGCAACCTCCCAGCTGCGCTCATTCCAGCTGACAGCGAGATGCAAGC AAATGCTCAGCTCTCCTTACCCTGAAGGGGTCTCCCTGGAATGGAAGTCCCCTGGCATGGTCAGTCCTCAGGCCC AAGGCTCAAGTGTGCACAGACCCCTGTGTTCTGTGGGTGAACAACTGCCCACTAACCAGACTGGAAAACCCAGAA AGATGGGCCTTCCATGAATGCTTCATCCCAGAGGGACCAGAGGGCCTCCCTGTGCAAGGGATCAAGCATGTCTGG $\verb|CCTGGGTTTTCAAAAAAAGGGGATCCTCATGACCTGGTGGTCTATGGCCTGGGTCAAGATGAGGGTCTTTCAGT|\\$

2534/2825 FIGURE 2249

MFKLRNSSSPATGEDPEGSDILNYFESYLAVASAVPSMLCLVANFLLVNRVAVHIRVLASLTVILAIFMVITALV KVDTSSWTRGFFAVTIVCMVILSGASTVFSSSIYGMTGSFPMRNSQALISGGAMGGTVSAVASLVDLAASSDVRN SALAFFLTATIFLVLCMGLYLLLSRLEYARYYMRPVLAAHVFSGEEELPQDSLSAPSVASRFIDSHTPPLRPILK KTASLGFCVTYVFFITSLIYPAVCTNIESLNKGSGSLWTTKFFIPLTTFLLYNFADLCGRQLTAWIRVPGPNSKA LPGFVLLRTCLIPLFVLCNYQPRVHLKTVVFQSDVYPALLSSLLGLSNGYLSTLALLYGPKIVPRELAEATGVVM SFYVCLGLTLGSACSTLLVHLI

2535/2825 FIGURE 2250

GTCCCGGCCATGCGCTGAGTGAACCCATCCTGCCGTCCTTCTCCACTTTCGCCAGCCCGTGCCGCGAGCGCGGC $\tt CTGCAGGAGCGCTGGCCGCGCGCGAACCCGAGTCCGGCGCACCGACGACGACGACCTCAACAGCGTGCTGGACTTC$ TTCTATTACCCCGAACCCGGCGCCCCCCCCCCTACAGCGCCCCCGCGGGTGGCCTGGTGTCTGAGCTGCTGCGA CCCGAGCTGGATGCGCCGCTGGGGCCCGCACTGCACGGCCGCTTTCTGCTGGCGCCCCGGCCCGGCCTGGTCAAG GCCGAGCCCCTGAAGCGGACGGCGGCGGCGGCTACGGCTGCGCCCCGGGCTGACCCGTGGACCGCGCCGCCCTC GGTGGCCCTGGTTTCGGCGCCCCGGGCCCGGCCTGCATTACGCGCCCTGCGCCCCCAGCCTTCGGTCTCTTC GACGACGCGGCCGCCGCGGCAGCCCTGGGCCTGGCGCCCCCGCCGCCGCGGTCTCCTCACGCCGCCTGCG TCCCCGCTGGAGCTGCTGGAGGCCAAGCCAAAGCGCGGCCGCTCTTGGCCCCGCAAACGCACCGCCACTCAC GGTGAGAAGCCCTACCACTGCAACTGGGACGGCTGCGGCTGGAAGTTTGCGCGCTCAGACGAGCTCACGCGCCAC TACCGAAAGCACACGGGCCACCGGCCATTCCAGTGCCATCTGTGCGATCGTGCCTTTTCGCGCTCCGATCACCTG GCGCTGCACATGAAACGGCACATG**TAG**CCGGGGACGCCCCCCCCCCCCCGCCGGGGGCCGTGGCGGGTCCCACGCG $\texttt{CCGGGCGCGCCCCTCCCAAACTGTGACTGGTATTTATTGGACCCAGAGAACCGGGCCGGGCACAGCGTGGCTA$ CAGAGGGTCTCCCTCGATGACGACGACGACGACGCCCACCCCAGCCCCCGTCTGTGACTGAAGGCCCGGTGGG AAAAGACCACGATCCTCCTTGACGAGTTTTGTTTTTCAAAATGGTGCAATAATTTAAGTGGCATCTTCTCCCCA CCGGGTCTACACTAGAGGATCGAGGCTTGTGATGCCTTGTGAGAAATAAGGGCCTTAATTTGTACTGTCTGCGGC ATTTTTTATAATATTGTATATAGTGACTGACAAATATTGTATTACTGTACATAGAGAGACAGGTGGGCATTTTTG

2536/2825 FIGURE 2251

MALSEPILPSFSTFASPCRERGLQERWPRAEPESGGTDDDLNSVLDFILSMGLDGLGAEAAPEPPPPPPPPAFYY PEPGAPPPYSAPAGGLVSELLRPELDAPLGPALHGRFLLAPPGRLVKAEPPEADGGGGYGCAPGLTRGPRGLKRE GAPGPAASCMRGPGGRPPPPDTPPLSPDGPARLPAPGPRASFPPPFGGPGFGAPGPGLHYAPPAPPAFGLFDDA AAAAAALGLAPPAARGLLTPPASPLELLEAKPKRGRRSWPRKRTATHTCSYAGCGKTYTKSSHLKAHLRTHTGEK PYHCNWDGCGWKFARSDELTRHYRKHTGHRPFQCHLCDRAFSRSDHLALHMKRHM

2537/2825 FIGURE 2252

 $\verb|TCTCCAGAGAAAG| \textbf{ATG} \\ \texttt{GTCATGAGGCCCCTGTGGAGTCTGCTTCTCTGGGAAGCCCTACTTCCCATTACAGTACAGT$ TGGTGCCCAAGTGCTGAGCAAAGTCGGGGGCTCGGTGCTGCTGGTGGCAGCGCGTCCCCCTGGCTTCCAAGTCCG ${\tt TGAGGCTATCTGGCGATCTCTGGCCTTCAGAAGAGCTCCTGGCCACGTTTTTCCGAGGCTCCCTGGAGACTCT}$ GTACCATTCCCGCTTCCTGGGCCGAGCCCAGCTACACAGCAACCTCAGCCTGGAGCTCGGGCCGCTGGAGTCTGG AGACAGCGGCAACTTCTCCGTGTTGATGGTGGACACAAGGGGCCAGCCCTGGACCCAGACCCTCCAGCTCAAGGT ${\tt GTACGATGCCCAGGCCCGTGGTACAAGTGTTCATTGCTGTAGAAAGGGATGCTCAGCCCTCCAAGACCTG}$ CCAGGTTTTCTTGTCCTGTTGGGCCCCCAACATCAGCGAAATAACCTATAGCTGGCGACGGGAGACAACCATGGA CTTTGGTATGGAACCACACCCTCTTCACAGACGGACAGGTGCTGAGCATTTCCCTGGGACCAGGAGACAGAGA TGTGGCCTATTCCTGCATTGTCTCCAACCCTGTCAGCTGGGACTTGGCCACAGTCACGCCCTGGGATAGCTGTCA TCATGAGGCAGCACCAGGGAAGGCCTCCTACAAAGATGTGCTGCTGGTGGTGGTGCCTGTCTCGCTGCTCCTGAT GCTGGTTACTCTCTCTCTGCCTGGCACTGGTGCCCCTGCTCAGGGAAAAAGAAAAAGGATGTCCATGCTGACAG ${\tt AGTGGGTCCAGAGACAGAGAACCCCCTTGTGCAGGATCTGCCA} {\tt TAAA} {\tt AGGACAATATGAACTGATGCCTGGACTAT}$ CAGTAACCCCACTGCACAGGCACACGATGCTCTGGGACATAACTGGTGCCTGGAAATCACCATGGTCCTCATATC TCCCATGGGAATCCTGTCCTGCCTCGAAGGAGCAGCCTGGGCAGCCATCACACCACGAGGACAGGAAGCACCAGC ACGTTTCACACCTCCCCCTTCCCCATCTTCTCATATCCTGGCTCTTCTCTGGGCAAGATGAGCCAAGCAG AACATTCCATCCAGGACACTGGAAGTTCTCCAGGATCCAGATCCATGGGGACATTAATAGTCCAAGGCATTCCCT CCCCCACCACTATTCATAAAGTATTAACCAACTGGCACCAAGGAATTGCCTCCAGCCTGAGTCCTAGGCTCTAAA AGATATTACATATTTGAACTAATAGAGGAACTCTGAGTCACCCATGCCAGCATCAGCTTCAGCCCCAGACCCTGC AGTTTGAGATCTGATGCTTCCTGAGGGCCAAGGCATTGCTGTAAGAAAAGGTCTAGAAATAGGTGAAAGTGAGAG GTGGGGGACAGGGTTTCTCTTTCTGGCCTAAGGACTTTCAGGTAATCAGAGTTCATGGGCCCTCAAAGGTAAAT TGCAGTTGTAGACACCGAGGATGGTTGACAACCCATGGTTGAGATGGCCACCGTTTTGCAGGAAACACCATATTA ATAGACATCCTCACCATCTCCATCCGCTCTCACGCCTCCTGCAGGATCTGGGAGTGAGGGTGGAGAGTCTTTCCT CACGCTCCAGCACAGTGGCCAGGAAAAGAAATACTGAATTTGCCCCAGCCAACAGGACGTTCTTGCACAACTTCA AGAAAAGCAGCTCAGCTCAGGATGAGTCTTCCTGCCTGAAACTGAGAGAGTGAAGAACCATAAAACGCTATGCAG AGACTTACCTTAGTTCAAGGGGAGGGGACAAAGACCCCACAGCCCAACAGCAGGACTGTAGAGGTCACTCTGACT CCATCAAACTTTTTATTGTGGCCATCTTAGGAAAATACATTCTGCCCCTGAATGATTCTGTCTAGAAAAGCTCTG GAGTATTGATCACTACTGGAAAAACACTTAAGGAGCTAAACTTACCTTCGGGGATTATTAGCTGATAAGGTTCAC AGTTTCTCTCACCCAGGTGTAACTGGATTTTTTCTGGGGCCTCAATCCAGTCTTGATAACAGCGAGGAAAGAGGT ATTGAAGAAACAGGGGTGGGTTTGAAGTACTATTTTCCCCAGGGTGGCTTCAATCTCCCCACCTAGGATGTCAGC CCTGTCCAAGGACCTTCCCTCTTCTCCCCCAGTTCCCTGGGCAATCACTTCACCTTGGACAAAGGATCAGCACAG AGATTACCTGAACAGGGTCCATGGCCACTCAACCTGTCAGCTTGCACCATCCCCACCTGCCACCTACAGTCAGGC CACATGCCTGGTCACTGAATCATGCAAAACTGGCCTCAGTCCCTAAAAATGATGTGGAAAGGAAAGCCCAGGATC CTCATTTCGACAGTGGTTTGTAGCGTGGTGCACCAGGGCCTTGTTGAACAGATCCACACTGCTCTAATAAAGTTC TGCATGTGCTGGGTACATTTCTTGGCACTTGGGAATCAGTAGTCAAGCGAAACCCTTGCCTTTGAGAGTTTATGG

2538/2825 FIGURE 2253

MVMRPLWSLLLWEALLPITVTGAQVLSKVGGSVLLVAARPPGFQVREAIWRSLWPSEELLATFFRGSLETLYHSR FLGRAQLHSNLSLELGPLESGDSGNFSVLMVDTRGQPWTQTLQLKVYDAVPRPVVQVFIAVERDAQPSKTCQVFL SCWAPNISEITYSWRRETTMDFGMEPHSLFTDGQVLSISLGPGDRDVAYSCIVSNPVSWDLATVTPWDSCHHEAA PGKASYKDVLLVVVPVSLLLMLVTLFSAWHWCPCSGKKKKDVHADRVGPETENPLVQDLP

2539/2825 FIGURE 2254

TCGTGAGGGGGTCGGCACGGGGGGGCGGTCTTGTGCATCTTGGCTACCTGTGGGTCGAAG**ATG**TCGGACAT CGGAGACTGGTTCAGGAGCATCCCGGCGATCACGCGCTATTGGTTCGCCGCCACCGTCGCCGTGCCCTTGGTCGG GCCAATCACTGCCACCTTTTATTTCCCTGTGGGTCCAGGAACTGGATTTCTTTATTTTGGTCAATTTATATTTCTT TAACTGGATTTGCATCGTGATTACTGGCTTAGCAATGGATATGCAGTTGCTGATGATTCCTCTGATCATGTCAGT ACTITATGTCTGGGCCCAGCTGAACAGAGACATGATTGTATCATTTTTGGTTTTGGAACACGATTTAAGGCCTGCTA TTTACCCTGGGTTATCCTTGGATTCAACTATATCATCGGAGGCTCGGTAATCAATGAGCTTATTGGAAATCTGGT TGGACATCTTTATTTTTCCTAATGTTCAGATACCCAATGGACTTGGGAGGAAGAATTTTCTATCCACACCTCA GTTTTGTACCGCTGGCTGCCCAGTAGGAGAGGAGGAGTATCAGGATTTGGTGTGCCCCCTGCTAGCATGAGGCG AGCTGCTGATCAGAATGGCGGAGGCGGGAGACACAACTGGGGCCAGGGCTTTCGACTTGGAGACCAG**TGA**AGGGG $\tt CGGCCTCGGGCAGCCGCTCCTCTCAAGCCACATTTCCTCCCAGTGCTGGGTGCGCTTAACAACTGCGTTCTGGCT$ AACACTGTTGGACCTGACCCACACTGAATGTAGTCTTTCAGTACGAGACAAAGTTTCTTAAATCCCGAAGAAAAA TATAAGTGTTCCACAAGTTTCACGATTCTCATTCAAGTCCTTACTGCTGTGAAGAACAAATACCAACTGTGCAAA AAA

2540/2825 FIGURE 2255

MSDIGDWFRSIPAITRYWFAATVAVPLVGKLGLISPAYLFLWPEAFLYRFQIWRPITATFYFPVGPGTGFLYLVN LYFLYQYSTRLETGAFDGRPADYLFMLLFNWICIVITGLAMDMQLLMIPLIMSVLYVWAQLNRDMIVSFWFGTRF KACYLPWVILGFNYIIGGSVINELIGNLVGHLYFFLMFRYPMDLGGRNFLSTPQFLYRWLPSRRGGVSGFGVPPA SMRRAADQNGGGGRHNWGQGFRLGDQ

2541/2825 FIGURE 2256A

CAGCGCTGCTCCCCGGGCGCTCCTCCCCGGGCGCTCCCCAGGCCTCCCGGGCGCTTGGATCCCGGCCATCTC CGCACCCTTCAAGTGGGTGTGGGTGATTTCCTGGCGGGGGGAGCAGCCAGGTGAGCCCAAGATGCTGCGCTC GAAGCCTGCGCTGCCGCCGCTGATGCTGCTCCTGGGGCCGCTGGGTCCCCTCTCCCCTGGCGCCCTGCC CCGACCTGCGCAAGCACAGGACGTCGTGGACCTGGACCTTCTTCACCCAGGAGCCGCTGCACCTGGTGAGCCCCTCGTTCCTGTCCGTCACCATTGACGCCAACCTGGCCACGGACCCGCGGTTCCTCATCCTCCTGGGTTCTCCAAAGCT TCCCAAGAAGGAATCAACCTTTGAAGAGAAGTTACTGGCAATCTCAAGTCAACCAGGATATTTGCAAATATGG ATCCATCCTCCTGATGTGGAGGAGAAGTTACGGTTGGAATGGCCCTACCAGGAGCAATTGCTACTCCGAGAACA CTACCAGAAAAAGTTCAAGAACAGCACCTACTCAAGAAGCTCTGTAGATGTGCTATACACTTTTGCAAACTGCTC AGGACTGGACTTGATCTTTGGCCTAAATGCGTTATTAAGAACAGCAGATTTGCAGTGGAACAGTTCTAATGCTCA GTTGCTCCTGGACTACTGCTCTTCCAAGGGGTATAACATTTCTTGGGAACTAGGCAATGAACCTAACAGTTTCCT TAAGAAGGCTGATATTTTCATCAATGGGTCGCAGTTAGGAGAAGATTTTATTCAATTGCATAAACTTCTAAGAAA TACCAGGGAAGATTTTCTAAACCCTGATGTATTGGACATTTTTATTTCATCTGTGCAAAAAGTTTTCCAGGTGGT TGAGAGCACCAGGCCTGGCAAGAAGGTCTGGTTAGGAGAAACAAGCTCTGCATATGGAGGCGGAGCGCCCTTGCT ATCCGACACCTTTGCAGCTGGCTTTATGTGGCTGGATAAATTGGGCCTGTCAGCCCGAATGGGAATAGAAGTGGT GATGAGGCAAGTATTCTTTGGAGCAGGAAACTACCATTTAGTGGATGAAAACTTCGATCCTTTACCTGATTATTG GCTATCTCTTCTGTTCAAGAAATTGGTGGGCACCAAGGTGTTAATGGCAAGCGTGCAAGGTTCAAAGAGAAGGAA GCTTCGAGTATACCTTCATTGCACAAACACTGACAATCCAAGGTATAAAGAAGGAGATTTAACTCTGTATGCCAT AAGACCTTTGGGACCTCATGGATTACTTTCCAAATCTGTCCAACTCAATGGTCTAACTCTAAAGATGGTGGATGA TCAAACCTTGCCACCTTTAATGGAAAAACCTCTCCGGCCAGGAAGTTCACTGGGCTTGCCAGCTTTCTCATATAG TTTTTTTGTGATAAGAAATGCCAAAGTTGCTGCTTGCATC**TGA**AAATAAAATATACTAGTCCTGACACTGAATTT TTCAAGTATACTAAGAGTAAAGCAACTCAAGTTATAGGAAAGGAAGCAGATACCTTGCAAAGCAACTAGTGGGTG CTTGAGAGACACTGGGACACTGTCAGTGCTAGATTTAGCACAGTATTTTGATCTCGCTAGGTAGAACACTGCTAA TAATAATAGCTAATAATACCTTGTTCCAAATACTGCTTAGCATTTTTGCATGTTTTACTTTTATCTAAAGTTTTGT TTTGTTTTATTTATTTATTTATTTATTTTGTGACGGAGAGATTCCATCTCAAAAAAACAAGTTATTAAAA ATGTATATGAATGCTCCTAATATGGTCAGGAAGCAAGGAAGCGAAGGATATATTATGAGTTTTAAGAAGGTGCTT AGCTGTATATTTATCTTTCAAAATGTATTAGAAGATTTTAGAATTCTTTCCTTCATGTGCCATCTCTACAGGCAC CAGCTAGATTTTGCTGATTTTCTTCTTTCGGTTTTCTTTGTCAGCAATAATATGTGAGAGGACAGATTGTTAGAT ATGATAGTATAAAAAATGGTTAATGACAATTCAGAGGCGAGGAGATTCTGTAAACTTAAAATTACTATAAATGAA TACCTTTCTTCCTTGTTTCAGTTGGGAAGCTTTTGGCTGCAAGTAACAGAAACTCCTAATTCAAATGGCTTAAGC AATAAGGAAATGTATATTCCCACATAACTAGACGTTCAAACAGGCCAGGCTCCAGCACTTCAGTACGTCACCAGG GGATCTGGGTTCTTCCCAGCTCTCTGCCATCTTTAGCGCTGGCTTCATTCTCAGACTCTGGTAGCATGAT GGCTGTAGCTGTTTCATGGGCCCCTTCAAACCTCATAGCAACCAGAGGAAGAAAATGAGCCATTTTTTGAGTCTC CTTCATAGACTTGAATAACTCTTTTTCAGAGCTTCTCACAGCAAACCTCTCCTCATGTCTCCTCATGTCTTATTG TTCAGAAATGGGTAATGTGGCCATTTCACCAGTCACTGCCAACAACAACGAGGTTCCTATAATTGTCTCTGAGTA ACCCTTTGGAATGGAGAGGGTGTTGGTCAGTCTACAAACTGAACACTGCAGTTCTGCGCTTTTTACCAGTGAAAA AATGTAATTATTTTCCCCTCTTAAGGATTAATATTCTTCAAATGTATGCCTGTTATGGATATAGTATCTTTAAAA TTTTTTTTTTTAATAGCTTTAGGGGTACACACTTTTTGCTTACAGGGGTGAATTGTGTAGTGGTGAAGACTCGGC TTTTAATGTACTTGTCACCTGAGTGATGTACATTGTACCCAATAGGTAATTTTTCATCCATTACCCTCCTTCCGC CCTCTTCCCTTCTGAGTCTCCAACATCCCTTATACCACTGTGTATGTTCTTGTGTACCTACAGCTAAGCTTCCAC TTATAAGTGAGAACATGCAGTATTTGGTTTTCCATTCCTGAGTTACTTCCCTTAGGATAACAGCCCCCAGTTCCG TCCAAGTTGCTGCAAAATACATTATTCTTCTTTATGGCTGAGTAATAGTCCATGGTACATATATACCACATTTTC TTTATCCACTTATCAGTTGATGGACACTTAGGTTAATTCCATTCAATTTCAATTTAAGTATATTTGTAAGG

2542/2825 FIGURE 2256B

2543/2825 FIGURE 2257

MLLRSKPALPPPLMLLLLGPLGPLSPGALPRPAQAQDVVDLDFFTQEPLHLVSPSFLSVTIDANLATDPRFLILL GSPKLRTLARGLSPAYLRFGGTKTDFLIFDPKKESTFEERSYWQSQVNQDICKYGSIPPDVEEKLRLEWPYQEQL LLREHYQKKFKNSTYSRSSVDVLYTFANCSGLDLIFGLNALLRTADLQWNSSNAQLLLDYCSSKGYNISWELGNE PNSFLKKADIFINGSQLGEDFIQLHKLLRKSTFKNAKLYGPDVGQPRRKTAKMLKSFLKAGGEVIDSVTWHHYYL NGRTATREDFLNPDVLDIFISSVQKVFQVVESTRPGKKVWLGETSSAYGGGAPLLSDTFAAGFMWLDKLGLSARM GIEVVMRQVFFGAGNYHLVDENFDPLPDYWLSLLFKKLVGTKVLMASVQGSKRRKLRVYLHCTNTDNPRYKEGDL TLYAINLHNVTKYLRLPYPFSNKQVDKYLLRPLGPHGLLSKSVQLNGLTLKMVDDQTLPPLMEKPLRPGSSLGLP AFSYSFFVIRNAKVAACI

2544/2825 FIGURE 2258

ACAAGTTGCTGGTGATTGGCGACCTGGGCGTGGGGAAGACCAGTATCATCAAGCGCTACGTGCACCAGAACTTCT CCTCGCACTACCGGGCCACAATCGGCGTGGACTTCGCGCTCAAGGTGCTCCACTGGGACCCGGAGACTGTGGTGC GCCTGCAGCTCTGGGATATCGCAGGTCAAGAAGATTTGGAAACATGACGAGGGTCTATTACCGAGAAGCTATGG GTGCATTTATTGTCTTCGATGTCACCAGGCCAGCCACATTTGAAGCAGTGGCAAAGTGGAAAAATGATTTGGACT $\verb|CCAAGTTAAGTCTCCCTAATGGCAAACCGGTTTCAGTGGTTTTGTTGGCCAACAAATGTGACCAGGGGAAGGATG|\\$ TGCTCATGAACAATGGCCTCAAGATGGACCAGTTCTGCAAGGAGCACGGTTTCGTAGGATGGTTTGAAACATCAG CAAAGGAAAATATAAACATTGATGAAGCCTCCAGATGCCTGGTGAAACACATACTTGCAAATGAGTGTGACCTAA AATCCTAGTAGGCACCTTTGCTGGTGTCTGGTAGGAATGACCTCATTGTTCCACAAATTGTGCCTCTATTTTTAC CATTTTGGGTAAACGTCAGGATAGATATACCACATGTGGCAAGCCAAAGATCTATGCCTCTGTTTTTTCAATGAG AGAGAAATAGCAAATGTTCTTTCTATGCTTTCCTCACCATCATCACAGTGTTTACAAACTTTTGAAAATATTTAG TCTGTTACAAACTTCTGTCATGTAGCTGACCAAAATCCTGCAGGGCCACAGTCGGCACTGTTATTTGCTTCTTTT AATCAGCAAAGGCCTCAAGTCTTAAAATAAAAGGGGAGAAGAACAAACTAGCTGTCAAGTCAAGGACTGGCTTTC ACCTTGCCCTGGTGTCTTTTTCCAGATTTCAATATATTCTCTGATGGCCTGACAGGCCTATTAAGTAGATGTGAT ATTTTCTTCCAAGATGACCTCCATTCTCGGCAGACCTAAGAGTTGCCTCTGAGTTAGCTCTTTGGAATCGTGAAC ACAGGTGTGCTATATTGTCCTTGTCCTAACTGTCACTTGCCATGGCCTGAATGTTGGCTTAACTGAATATTGTAT GAAAAGACATGCCTCCATATGTGCCTTTCTGTTAGCTCTCTTTTGACTCAAGCTGTGGGGCTCCTCTATACATGCT ATACATGTAATATATATATATTTTTTGCAAGTGAACAATAAAACATTAAAAGATAAAA

2545/2825 FIGURE 2259

 ${\tt MQAPHKEHLYKLLVIGDLGVGKTSIIKRYVHQNFSSHYRATIGVDFALKVLHWDPETVVRLQLWDIAGQERFGNM}\\ {\tt TRVYYREAMGAFIVFDVTRPATFEAVAKWKNDLDSKLSLPNGKPVSVVLLANKCDQGKDVLMNNGLKMDQFCKEH}\\ {\tt GFVGWFETSAKENINIDEASRCLVKHILANECDLMESIEPDVVKPHLTSTKVASCSGCAKS}$

2546/2825 FIGURE 2260

 ${\tt GGCACGAGGGGGGGGGGAAGCCGTGTCTCGCAGTCGTGGACTCGTGCAGCTGGGGGCGTCCGCAGCCGCTCGTCA}$ $\tt CCCGCGTGATGCTGTTTCTGGCGTTGGGCAGCCCGTGGGCGGTCGAACTGCCTCTCTGCGGAAGGAGGACTGCAT$ TGTGTGCGGCCGCGCGCTCCGAGGTCCCCGGGCCTCTGTCTCCCGGGCGTCCTCCAGCAGCGGGCCTTCGGGGC CGGTAGCCGGCTGGAGTACGGGGCCTTCGGGAGCCGCGCGCCTTCTCCGGCGTCCGGGTCGAGCGCAGATCCCTG TTTATTGGGAAGGATATGTTCGATTCTTAAATACGCCATCTGACAAATCAGAAGATGGAAGGCTAATTTATACTG GCAAT**ATG**GCCCGAGCAGTGTTTGGTGGAAATGTTTCTCTTATTCTACGAGTCTGATTGGCCTTACATTTCTGC CATACATTTTTACACAAAATAATGCTATTTCTGAAAGTGTGCCTCTGCCTATTCAAATCATATTCTATGGCATCA TGGGAAGCTTTACGGTGATCACCCCAGTGCTGCTTCACTTTATTACAAAAGGCTATGTCATTCGATTGTACCATG AGGCCACAACAGACACTTATAAAGCCATTACCTACAATGCTATGCTTGCAGAAACGAGTACAGTGTTTCACCAGA AAGAAACCAGTGAAGAGAAACGGCATAAAGATGACAAA**TGA**GCCTATTTGTTAGTGTTCGTGCTCAAATGTGATT TACGTTTTAATGTATAATAAAATTGCCTTTTGCATTCCGTTAGTGACTGATTGTTAAAAATAATTTGAAATT ATCAAAGCTTTTAATTTCCAGAGAATGATGTTTGTTTATAATAAAACAAGCTATGTTTGAAAACCAAAATGTAGT ATCTACCATTCGTGTTTTAGAAAGGTATGTGAATAAATATGTTCATGCTAGTATAAGAGTTCTGTGTTACTGTGG TTGACTCTAAACTGGGGATCTGATGTCAGTAGCAAATGGGAGAGTTGCTTTATTCTTTGTGTATGGATTTTTCTA AGTGTATAAATATTTTCCGACATTAAAAGACATTTTCTCTTTGAGGAAGACACAGTCATAGGTGGTGCGGAGCTG TGGTCCACCTGCTCCTGACTCACTGCTCTTTGCTGTTGCCTGAGGACCAAGTCTGTCAGGAAGCTGGCT AGGAAGCCTTGCAGCAGCCATGGCTTTTAAACATACCAGAAAAACACCCGTGGAGTCAGAGGTGGCAATTCACCG AATTCATATCACTCTAACGAGTTGCAACGTAAAATCCCTGGATAAGGTGTGTGCTGACTTGATCTGAGGAGCAAA GGAAAAGAATCAGTGAAAGGACCAGTTTGAATGCCTACCAAGACTTTGAGAATCACTACAAGAAAAAACTTACGGT GAAGGTTCTAAGGCATGGGATCGTTTCCAGATGAGAATCCACAAGCGACTCATTGACTTGCGCAGTCCTCAGATA GTTAAGCAGATTACTTCCATCAGTATTGAGCCAGGAGTTGAGATGGAAGTCACCATTGCAAATGCTTAAGTCAAC TGTTTTCATAAATTGATTACCAGTTGTTAAAAAAATTTTCAAAAAAACCGCAAAATTTCAAGAAATTCACAAATTAT GGGAGCAGTTTTAAGTCTTCTTTGGTTCAGAACACAGGTTTTTGCCTAACCCCTGGCATGATTGCCCATAAGAAC ATACATGTACAGTTGAACTGGTGGTTAGCTATACGGGAAATGGTAAGTAGTGTTGTCTTCAGTATCTTAATTTGT ATAAAAATTTTTCAAAAAAAAAAAAAAAAAAAAAA

2547/2825 FIGURE 2261

 ${\tt MARAVFGVKCFSYSTSLIGLTFLPYIFTQNNAISESVPLPIQIIFYGIMGSFTVITPVLLHFITKGYVIRLYHEATTDTYKAITYNAMLAETSTVFHQNDVKIPDAKHVFTTFYAKTKSLLVNPVLFPNREDYIHLMGYDKEEFILYMEETSEEKRHKDDK$

2548/2825 FIGURE **2262**

CGGCACGTTTGGTCGGTGGCCTCTGCTGAGTCTGCTGCTGCTGCTGCTGCTCCAGCCTGTAACCTGTGCCTA CACCACGCCAGGCCCCCCAGAGCCCTCACCACGCTGGGCGCCCCCAGAGCCCACACCATGCCGGGCACCTACGC TCCCTCGACCACACTCAGTAGTCCCAGCACCCAGGGCCTGCAAGAGCAGGCACGGGCCCTGATGCGGGACTTCCC GCTCGTGGACGGCCACAACGACCTGCCCCTGGTCCTAAGGCAGGTTTACCAGAAAGGGCTACAGGATGTTAACCT GCGCAATTTCAGCTACGGCCAGACCAGCCTGGACAGGCTTAGAGATGGCCTCGTGGGCGCCCCAGTTCTGGTCAGC CTATGTGCCATGCCAGACCCAGGACCGGGATGCCCTGCGCCTCACCCTGGAGCAGATTGACCTCATACGCCGCAT CATCGGTGTAGAGGGTGGCCACTCGCTGGACAATAGCCTCTCCATCTTACGTACCTTCTACATGCTGGGAGTGCG CTACCTGACGCTCACCCACACCTGCAACACCCTGGGCAGAGAGCTCCGCTAAGGGCGTCCACTCCTTCTACAA ${\tt CAACATCAGCGGGCTGACTGACTTTGGTGAGAAGGTGGTGGCAGAAATGAACCGCCTGGGCATGATGGTAGACTT}$ ATCCCATGTCTCAGATGCTGTGGCACGGCGGGCCCTGGAAGTGTCACAGGCACCTGTGATCTTCTCCCACTCGGC TGCCCGGGGTGTGTGCAACAGTGCTCGGAATGTTCCTGATGACATCCTGCAGCTTCTGAAGAAGAACGGTGGCGT $\tt CGTGATGGTGTCTTTGTCCATGGGAGTAATACAGTGCAACCCATCAGCCAATGTGTCCACTGTGGCAGATCACTT$ $\tt CGACCACATCAAGGCTGTCATTGGATCCAAGTTCATCGGGATTGGTGGAGATTATGATGGGGCCGGCAAATTCCC$ ${\tt TCAGGGGCTGGAAGACGTGTCCACATACCCGGTCCTGATAGAGGAGTTGCTGAGTCGTGGCTGGAGTGAGGAAGA}$ GCTTCAGGGTGTCCTTCGTGGAAACCTGCTGCGGGTCTTCAGACAAGTGGAAAAGGTACAGGAAGAAAACAAATG GCAAAGCCCCTTGGAGGACAAGTTCCCGGATGAGCAGCTGAGCAGTTCCTGCCACTCCGACCTCTCACGTCTGCG TCAGAGACAGAGTCTGACTTCAGGCCAGGAACTCACTGAGATTCCCATACACTGGACAGCCAAGTTACCAGCCAA $\tt GTGGTCAGTCTCAGAGTCCTCCCCCACATGGCCCCAGTCCTTGCAGTTGTGGCCACCTTCCCAGTCCTTATTCT$ $\tt GTGGCTC{\color{red}{\textbf{TGA}}} TGACCCAGTTAGTCCTGCCAGATGTCACTGTAGCAAGCCACAGACACCCCACAAAGTTCCCCTGT$ TGTGCAGGCACAAATATTTCTTGAAATAAATGTTTTGGACATAGAAAAAA

2549/2825 FIGURE 2263

MQPSGLEGPGTFGRWPLLSLLLLLLLLQPVTCAYTTPGPPRALTTLGAPRAHTMPGTYAPSTTLSSPSTQGLQEQ
ARALMRDFPLVDGHNDLPLVLRQVYQKGLQDVNLRNFSYGQTSLDRLRDGLVGAQFWSAYVPCQTQDRDALRLTL
EQIDLIRRMCASYSELELVTSAKALNDTQKLACLIGVEGGHSLDNSLSILRTFYMLGVRYLTLTHTCNTPWAESS
AKGVHSFYNNISGLTDFGEKVVAEMNRLGMMVDLSHVSDAVARRALEVSQAPVIFSHSAARGVCNSARNVPDDIL
QLLKKNGGVVMVSLSMGVIQCNPSANVSTVADHFDHIKAVIGSKFIGIGGDYDGAGKFPQGLEDVSTYPVLIEEL
LSRGWSEEELQGVLRGNLLRVFRQVEKVQEENKWQSPLEDKFPDEQLSSSCHSDLSRLRQRQSLTSGQELTEIPI
HWTAKLPAKWSVSESSPHMAPVLAVVATFPVLILWL

2550/2825 FIGURE 2264

AGCTGGAAGAGTTGAAGGAGAGTATTCTGGCCGATAAATCCCTGGCTACTAGAACTGACCAGGACAGCAGAACTG ATAAAGACGATGCAGGTTGGTCTCCTCTTCATATTGCGGCTTCTGCTGGCCGGGATGAGATTGTAAAAGCCCTTC TGGGAAAAGGTGCTCAAGTGAATGCTGTCAATCAAAATGGCTGTACTCCCTTACATTATGCAGCTTCGAAAAACA GGCATGAGATCGCTGTCATGTTACTGGAAGGCGGGGCTAATCCAGATGCTAAGGACCATTATGAGGCTACAGCAA TGCACCGGGCAGCAGCCAAGGGTAACTTGAAGATGATTCATATCCTTCTGTACTACAAAGCATCCACAAACATCC AAGACACTGAGGGTAACACTCCTCTACACTTAGCCTGTGATGAGGAGAGAGGTGGAAGAAGCAAAACTGCTGGTGT CCCAAGGAGCAAGTATTTACATTGAGAATAAAGAAGAAAAGACACCCCTGCAAGTGGCCAAAGGTGGCCTGGGTT TAATACTCAAGAGAATGGTGGAAGGT**TAA**ACAGCTTGGATTTATTCTTACTTTGTATGTTGTTGTTGTTGTCCCCA ATAAACATGTTGACTCTTGTTCCTGCTGAGTTACTTGTTCGAAGCTTACAGCTTGTTTTCCAGGCATCGAATAAC TGTTGAGATTGTTCTACTGTTGTCGTATATTCTTCTATATTGAATTCTGGTTAATTTGGAGTAACTAATTCTGTG GCTGTTGTGAGTCTTCAGCACCCTCCCATGTACCTTATATCCCTCTCTGAAACAGAACAGCTCCAATAGCAACAA GCTAGTTGTTCTGCCAGATGTTTCTATGTGGATTCTGTAATGTTCCTCCATACAGTTAAAACATCCTAACTTGTT GAGGGATATTTACATATTTTAGTGGACCACATTTTAAGTTGGATGGTGTGCTCTAAAATACTGAAAAACAATAGC ${\tt CCATATACCTATGTATTTGTTTTTGATGGGTTGTTTACTCTGAAATAAAATGTATGGTTTTCTTAAAAGGAAGTT}$ TTAAAGTACCTATTTTGTGTCATCCTGTATTGAAAAGAATGTCAAGCTTGTTAAAATGACATGTAACAAAAATGT ATTTTGATTTGTATTTCAGAAACTAAAAAATAAAATGTTGAAAG

2551/2825 FIGURE 2265

MEGCVSNLMVCNLAYSGKLEELKESILADKSLATRTDQDSRTALHWACSAGHTEIVEFLLQLGVPVNDKDDAGWS PLHIAASAGRDEIVKALLGKGAQVNAVNQNGCTPLHYAASKNRHEIAVMLLEGGANPDAKDHYEATAMHRAAAKG NLKMIHILLYYKASTNIQDTEGNTPLHLACDEERVEEAKLLVSQGASIYIENKEEKTPLQVAKGGLGLILKRMVE G

2552/2825 FIGURE **2266**

GGCACGAGGCTTGTCCCCAGCGCCTGGACTCCCCCTTAACTGCTTGGGAAATGTGACCTTTGCTCTGGGGGGCCCT GGCCTGCAGGCCCCAACCTTCCCTCATCTCTGGCGGCCCTCTTGGGCCTCTGACCCAGCCCCTCCCCGGGCCAG GCTCACAGAAGCTGGCTTCTGGGACTGTCCTGGGCCCAAGTGGGCACCTGCGCCCAGCCCCACCTGTGCCTGGGCT GTGGCCCCTTCCTACAGGGCGCTCACCATGGCCCCGCCGCTCCTGCTGCTGCTGCTGCCAGTGGAGCGGCCGCC TGCCCGCTGCCTGCGTCTGCCAGAACCTGTCCGAGTCGCTCAGCACCCTCTGTGCCCACCGAGGCCTGCTTT GACTTCCGCAACATGACGGGACTGGTGGACCTGACACTGTCTCGCAATGCCATCACCCGCATTGGGGCCCGCGCC TTTGGGGACCTCGAGAGCCTGCGTTCCCTCCACCTTGACGGCAACAGGCTGGTGGAGCTGGGCACCGGGAGCCTC CGGGGCCCCGTCAATCTGCAGCACCTCATCCTCAGCGGCAACCAGCTGGGCCGCATCGCGCCGGGAGCCTTCGAC GACTTCCTAGAGAGCCTGGAGGACCTGGACCTGTCCTACAACAACCTCCGGCAGGTGCCCTGGGCCGGCATCGGC GCCATGCCTGCACACCCTCAACCTGGACCATAACCTTATTGACGCACTGCCCCCAGGCGCCTTCGCCCAG CTCGGTCAGCTCTCCCGCCTGGACCTCCAACCGCCTGGCCACGCTGGCTCCGGACCCGCTTTTCTCTCGT GGGCGTGATGCAGAGGCCTCTCCCGCCCCCTGGTGCTGAGCTTTAGCGGGAACCCCCTGCACTGCAACTGTGAG TACTTCTGGGCAGTGCCCGAGGGCGAGTTCTCCTGTGAGCCGCCCTCATTGCCCGCCACACGCAGCGCCTCTGG $\tt GTGCTGGAAGGCCAGCGGGCCACGCTGCGGTGCCGGGCCCTGGGTGACCCCGCGCCTACC{\color{red} ATG}{\color{blue} CACTGGGTCGGT}$ CCTGACGACCGGTTGGTTGGCAACTCCTCCCGAGCCCGGGCTTTCCCCAACGGGACCTTAGAGATTGGGGTGACC GGCGCTGGGGACGCTGGGGGGCTACACCTGCATCGCCACCAACCCTGCTGGTGAGGCCACAGCCCGAGTAGAACTG CGGGTGCTGGCCTTGCCCCATGGTGGGAACAGCAGTGCCGAGGGGGGCCCCCGGGGCCCTCGGACATCGCCGCC ACCTCAGGGCTGGTGAGCTGGGGTCCCGGGCCGGCCGACCCAGTGTGGATGTTCCAAATCCAGTACAACAGC AGCGAAGATGAGACCCTCATCTACCGGATTGTCCCAGCCTCCAGCCACCACTTCCTGCTGAAGCACCTCGTCCCC GGCGCTGACTATGACCTCTGCCTGCCCTGTCACCGGCCGCTGGGCCCTCTGACCTCACGGCCACCAGGCTG CTGGGCTGTGCCCATTTCTCCACGCTGCCGGCCTCGCCCCTGTGCCACGCCCTGCAGGCCCACGTGCTGGGCGGG ACCCTGACCGTGGCCGTGGGGGGTGTGCTGGTGGCCTTACTGGTCTTCACTGTGGCCTTGCTGGTTCGGGGC CGGGGGGCCGAAATGGCCGCCTCCCCTCAAGCTCAGCCACGTCCAGTCCCAGACCAATGGAGGCCCCAGCCCC ACACCCAAGGCCCACCCGCCGGGAGCCCCCCGCCCCGGCCGCAGCGCAGCTGCTCTCTGGACCTGGGAGATGCC GGGTGCTACGGTTATGCCAGGCGCCTGGGAGGAGCTTGGGCCCGACGGAGCCACTCTGTGCATGGGGGGCTGCTC TTTTTATTCTCAGTACCTCAGGCTCCCCTGTGTACTTGGAGGGGCAGGGAGCCCTTTCCTCGGTTCTGGCCTCCA

2553/2825 FIGURE 2267

MHWVGPDDRLVGNSSRARAFPNGTLEIGVTGAGDAGGYTCIATNPAGEATARVELRVLALPHGGNSSAEGGRPGP SDIAASARTAAEGEGTLESEPAVQVTEVTATSGLVSWGPGRPADPVWMFQIQYNSSEDETLIYRIVPASSHHFLL KHLVPGADYDLCLLALSPAAGPSDLTATRLLGCAHFSTLPASPLCHALQAHVLGGTLTVAVGGVLVAALLVFTVA LLVRGRGAGNGRLPLKLSHVQSQTNGGPSPTPKAHPPRSPPPRPQRSCSLDLGDAGCYGYARRLGGAWARRSHSV HGGLLGAGCRGVGGSAERLEESVV

2554/2825 FIGURE 2268A

CCCGAGGCGCGCTGGGCCCCGAGGCGGTGCTGCGCTTCCTGGCGGAGCGCGGGGGCCCGGGCCCTGCACGCCGAG CTGGTGAACGCCGTGGCCACTGTGCGCGTCGATCCCGCCGACGGCGCCAAGTACGTGCACCTCAAGAAGAGGTTC TGTGAAGGGCCGTCCGAGCCCTCCGGGGACCCGCCGAATCCAGGTGACCGCCGAGCCCCGAGGCCCCGACGGC CCTGCCGGGCCCGAGGCGCGATCGGCTCCCCGACGCGGCGCCCCGGAGTCGCTCCCTGGACAGGGCCGCGAG CTGGGCGAGGGAGAGCCCCCGCCCCCGCGCACTGGCCCCCTGAGCGCCCGGGGCTCGCAGGAAGAACTCGCGG CGCGACGTGCAGCCCCTACCGCGGACTCCAGCCCCGGGGCCCAGCGAGGACCTGGAGCTCCCGCCACATGGCTGC GTGATGGGCAGCTCCCCGCAGCTGAAGAGGAGCGTGTGTCCCGGGGGCAGCCCGGGCAGCTCCTCCGGGGGAA GGACGCGGCAGAGGCGGGGGGCGACTCAGACAGCGCATCGGTGGCCTCGTCGTCCGCGGAGGAGGAGCAGCGGC GGAGGCTCCGTGACGCTGGACCCCTGGAGCACGCGTGGATGCTCTCTGCCTCCGATGGCAAGTGGGACAGCCTG GAGGGCTTGCTCACCTGCGAGCCCGGCCTGCTGGTCAAGCGGGACTTCATTACCGGCTTCACTTGCCTGCGCTGG ${\tt GCCGCAAGCACGGCAGGCAGGCTTGTGGCCATGC}$ ${\tt TAG}$ ${\tt TCAACTTCGCCAACAAACACCAGCTGCCGGTGAACA}$ TGGACGCCAGGACGAGCGGGGTTACACCGCCCTGCACTTGGCAGCCATGCACGGCCACGTGGAGGTGGTGAAGC TGCTGGTGGGGGCCTACGACGCCGATGTGGACATCAGGGACTACAGTGGGAAAAAGGCCTCCCAGTACCTGAGTC GGAGCATCGCCGAGGAGATCAAGAACCTGGTGGGAGCCCTGGACGAGGGTGACGGGGAAAGCGCCGCGGGTAGCG GCGGCGGGCGCTGGAGGCTTTCAAAGGTGCTTCCCTCGCATCTCATCACCTACAAACTCTCACACGCCCTAGAAG AAGCCTCGGGCAGCTCTAGTGGACGTATAAAACCCAGACTCAACAAAATCCGATTCAGAACCCAGATCGTCCACA TTAAAGGCCACTCGCCCTTCACATTGAGACCAAAGTCCAATGTATTTGGGTAAAAATTGCTTCTTTTAGAAAATG CAAAGGTTTATTTGTCTTAATAAATTGAATACTAGGTGTTGTAAGGAAGTGAGACCAGAAGGACAAGCTAAATTA TGCATTCTTACTTGAGGGATCGGAATGGATGGGCGGAGTTCTCTTCGGGCTAGCCTTCTGGGAAAAGTGGATGT CTTTTTCAGAGATTCATCATACCTTGACCTGTACCTCTTCTCTGCCCTCCACTTCCCTGCCCTGGAGTCCGTTTC ATTCCTGGATGCCTGCAAAGTAAGGAATAATGCAGTTTTTATGTATCTGATTTTATAAGGGGGTTACTCTTTCAAG AGTAACAAAAAAATGCAAACTGTAATGAAACTACATTGTATTTCTAAGTGTGAAAACGACAGGCTGCCCCGTTTT TACTAATTGCATTTGCATTTTAAGGTACTACTGAAGGTCAGATCAAAGTTGAAATGCAAAAATACTAATTAGAGA ATAATGTGAATAAAATGGGAATCTTCTTGGTATTTTATGTGTATTGTAAGTAGCAGTTAAATTATTTTTTAAAA GCAATTTCAGTTTTAATCACTGAACAAAAGAAACAGGCAACATTCACTTCTGTAGTATGGTTTCCACCTATCTCT GCAGCCTATGATAGTTTTCAATAAAATGTTGCCTCTCTTTCGGATTCTCACTAACTTTTGTTACTATTCTAAAAG TTTGAATTTGCTGGGGTGTTTATTCTGAGGATTATTTAACCATTGTTCTATTTGGCATAACCCTATTTAATGGTG CTTAGAGCTGAATTACCTACAGAAACTGTTTCTGGTTTAAATAATTAGCACAAATTGGCCTAAGTATTCATGAGC CCATGTTTCTGTGAAGTAATTATTAAACCAACTTAATGATTCTTATGTAAGGTACACTTTTTATTTTAATACATT GGTAGTCTCTATGACTTGTAGCAATGTTTTACAAATGTTTAAAATGCTAAACTTAATTTTCCAAGCTTTTCTTGA CAATTAGATACCTATCCTGTAGTTACTGAAAATCTGGGTAGTAAATCTACCCAATTAAAATGGCACTTTATAAAA GGGAATAGAGAAGAGATGGGACTATTTCTATATTTAAATGCTGCTGGCTATTCCTTTGTATATAAATGAAAAAATA AGGGACTAATTTAAACAAGTCCTCCTTTAGTCTTTTGGGTCGCGTAGTTGCTGAAACCTAAGTACCTGCAGCCTA CAGGATAAGGAAGTTCACAGCCTGCGGGGTGAATGAACCCATGTGTGAACTGCACAGAGCAATTCATAGAAAATG CAGGCATGGTGGCTCATGCCTGTAATCCCAGCACTTTGGGAGGCCGAGGCAGGTGGATCACTTGAGGCCAGGAGT TTGAAACCAGCCTGGCCAACATGGTGAAAACCTGTCTCTACTAAAAATACAAAAATTAGCCGAGCGTGGTGGTGC GTGCCTGTAGTCCCAGCTACTTAGGAGGCTGAGGCATGAGAATCACTTAAACCTGAGAGGTGGAGGTTGCAGTTG

2555/2825 FIGURE 2268B

2556/2825 FIGURE 2269

MEGPAEWGPEAALGPEAVLRFLAERGGRALHAELVQHFRGALGGEPEQRARARAHFKELVNAVATVRVDPADGAK YVHLKKRFCEGPSEPSGDPPRIQVTAEPEAPDGPAGPEARDRLPDAAAPESLPGQGRELGEGEPPAPAHWPPLSA GARRKNSRRDVQPLPRTPAPGPSEDLELPPHGCEEADRGSSLVGATAQRPARQNLRDLVMGSSPQLKRSVCPGGS SPGSSSGGGRGGGGDSDSASVASSSAEEESSGGGSVTLDPLEHAWMLSASDGKWDSLEGLLTCEPGLLVKRDFI TGFTCLRWAASTAGRSLWPC

2557/2825 FIGURE 2270

2558/2825 FIGURE 2271

 ${\tt MDVLFVAIFAVPLILGQEYEDEERLGEDEYYQVVYYYTVTPSYDDFSADFTIDYSIFESEDRLNRLDKDITEAIE}\\ {\tt TTISLETARADHPKPVTVKPVTTEPSPDLNDAVSSLRSPIPLLLSRAFVQVGMYFM}$

2559/2825 FIGURE 2272

GAATTCCGGGCACCCTCGAGCGAGCGAGCTAGCCAGCAGCATCGAGGGGGGCGCGGCTGCCGTCCGGACGAGAC AGGCGAACCCGACGCAGAAGAGTCCACCACCGGACAGTCAGGTAGCCGCCGCGTCCCTCGCACACGCAGAGTCGG GTCTTGTCGCCCGTGGGACCTTCCCAGTACTAGTGCGCACCAGCCCTGCCGCAGCCTCTTCGGGCCGGTGGACC ACGAGGAGCTGAGCCGCGAGCTGCAGGCCCGCCTGGCCGAGCTGAACGCCGAGGACCAGAACCGCTGGGATTACG ACTTCCAGCAGGACATGCCGCTGCGGGGCCCTGGACGCCTGCAGTGGACCGAAGTGGACAGCGACTCGGTGCCCG CGTTCTACCGCGAGACGGTGCAGGTGGGGCGCTGCCGCCTGCTGCTGCCGCGGCCCGTCGCGGTCGCGGTGG $\verb|CTGTCAGCCCGCCCCTCGAGCCGGCCTGAGTCCCTCGACGGCCTCGAGGAGGCGCCGGAGCAGCTGCCTAGTG| \\$ TCCCGGTCCCGGCCCCGGCCCCCCAGTCCCGGTCCTGGCTCCAGCCCCGGCCCCGGCTCCGGCTC CGGTCGCGGCTCCGGTCGCGGTCGCGGTCGCGGTCCTGGCCCCGGCCCCGGCCCCGGCCCCGGCTCCGG CGGCCCGGACGCGCCCTCAAGAGAGCGCCGAGCAGGGCGCGAACCAGGGGCAGCGCGGCCAGGAGCCTCTCG TCAAGAAGCTGTCCGGGCCTCTGATCTCCGATTTCTTCGCCAAGCGCAAGAGATCAGCGCCTGAGAAGTCGTCGG GCGATGTCCCCGCGCGTGTCCCTCTCCAAGCGCCGCCCCTGGCGTGGGCTCGGTGGAGCAGACCCCGCGCAAGA GGCTGCGG**TGA**GCCAATTTAGAGCCCAAAGAGCCCCGAGGGAACCTGCCGGGGCAGCGGACGTTGGAAGGGCGCT GGGCCTCGGCTGGGACCGTTCATGTAGCAGCAACCGGCGGCGGCTGCCGCAGAGCAGCGTTCGGTTTTGTTTTTA AATTTTGAAAACTGTGCAATGTATTAATAACGTCTTTTTATATCTAAATGTATTCTGCACGAGAAGGTACACTGG TCCCAAAGTGTAAAGCTTTAAGAGTCATTTATATAAAATGTTTAATCTCTGCTGAAACTCAGTACAAAAAAACCG GGATTCCGGCC

2560/2825 FIGURE 2273

2561/2825 FIGURE 2274

GCCGGCTCCAGTTAGAGCTCGGGTCTCCTCGCCACAGCTCCGAGTCTTTCGTTCTGGGAGGCCCAGGCGGCTTCG CGTTCTGAGAATAAACAGAACCTCTGTTGCTCTGCGACTTGCAGGCACTGGGAGATTCGTAGCTAAGACGCCAGG GCATCCCGGAAGCTGGGAAATGGGACTGTTGACATTCAGGGATGTGGCCGTAGAATTCTCTTTGGAGGAGTGGGA ACACCTGGAACCAGCTCAGAAGAATTTGTATCAGGATGTGATGTTAGAAAACTACAGAAACCTGGTCTCTCTGGG TCTTGTTGTCTCTAAGCCGGACCTGATCACCTTTTTGGAACAAGGAAAGAGCCTTGGAATGTGAAGAGTGAGGA GACAGTAGCCATCCAGCCAGATGTGTTTTCGCATTATAACAAGGACCTGTTGACAGAGCCACTGCACAGAAGCTTC ATTCCAAAAAGTGATATCGAGGAGACATGGGAGCTGTGATCTTGAGAATTTACATTTAAGAAAAAGGTGGAAAAG GGAGGAGTGTGAAGGGCACAATGGATGTTATGATGAAAAGACTTTTAAATATGATCAATTTGATGAATCCTCTGT TGAAAGTTTGTTTCACCAGCAAATACTTTCTTCTTGTGCCAAAAGCTATAACTTTGATCAATATAGGAAGGTCTT TACTCATTCATCATTGCTTAATCAACAAGAGGAAATAGATATTTGGGGGAAAACATCACATATATGATAAAACTTC AGTGTTATTTAGGCAGGTCTCTACTCTAAATAGTTACCGAAATGTTTTTATTGGAGAGAAAAATTATCATTGCAA TAATTCTGAAAAAACCTTGAACCAAGCTCAAGCCCTAAAAATCATCAGGAAAATTATTTTCTAGAAAAAACAATA CAAATGTAAAGAATTTGAGGAAGTCTTTCTTCAGAGTATGCATGGGCAAGAGAAACAAGAACAGTCTTACAAATG GAAACCATACAAATGTGAAAAATGTGGGGGATAGCTTAAACCATAGTTTGCACCTTACTCAACATCAGATCATTCC TACCGAAGAGAAACCCTATAAATGGAAAGAATGTGGCAAGGTCTTTAACCTTAACTGTAGTTTATACCTTACTAA ACAGCAGCAAATTGATACTGGAGAAAACCTTTACAAATGTAAAGCATGTAGCAAATCTTTTACTCGTTCCTCCAA TCTTATTGTGCATCAGAGAATTCACACTGGAGAGAAACCATACAAATGTAAAGAATGTGGCAAAGCCTTTCGCTG TAGTTCATACCTTACTAAACATAAGCGAATTCATACTGGAGAGAAACCTTATAAATGTAAAGAATGTGGAAAAGC TTTTAACCGTAGTTCATGCCTTACTCAACATCAGACAACTCATACAGGAGAAAAACTTTACAAATGTAAAGTATG TAGCAAATCTTATGCTCGTTCTTCAAATCTTATTATGCATCAGAGAGTTCATACTGGAGAGAGCCTTATAAATG TAAAGAATGTGGCAAAGTCTTTAGCCGTAGTTCTTGCCTTACTCAACATCGGAAAATTCATACTGGAGAAAATCT TTACAAATGCAAAGTATGTGCTAAACCTTTTACTTGTTTCTCAAATCTTATTGTGCATGAGAGAATTCATACTGG AGAGAAACCCTATAAATGTAAAGAATGTGGCAAAGCCTTTCCTTATAGTTCACACCTTATTCGACATCATCGAAT TCATACTGGAGAAAAACCATACAAATGTAAAGCATGTAGCAAATCTTTTAGTGACTCCTCAGGTCTTACTGTGCA TCGGCGAACTCATACTGGAGAGAAACCCTATACATGTAAAGAATGTGGCAAAGCCTTTAGTTATAGTTCAGATGT TATTCAGCATCGGAGAATTCATACTGGCCAGAGACCCTACAAATGTGAAGAATGTGGCAAAGCCTTCAACTATAG AGAATGTGGCAAAGCCTTTAACTCTAGGTCATACCTCATTGCACATCAGAGAAGTCATACTAGAGAAAAACTT<u>TA</u> ${f \underline{A}}$ AAATGTAAAACATGGAGCAGATTTTTTACTTGTTACCCATGTCTTATTGTGCATCAGATAATTTATATGGGAGT GAAACCCTACAAATGTTAAGAATGTGGCATAACCTTTAACTATTTTCAAGCCTTACACAATAGCAGAGAATATAA ACTGAAAAAATCCATACAAATATTAAAAATGTGGCAAATTATTTTAAACTGTGCTCAACCCTTACTCAAGATAAT CCATACTAGAGAAACACTATAGATGTAAAAATGTGAAAAGTTTTATTCAAAATATCAAACTTATGAGTCACCTAG GGGTTCATAGAAAAAGGAAGTTTGCAGATGCAATAAATGTGAGGAAGTATTTAATAAAAAATGAAGTCTAAATGT GTCAGAGAATTTATGTGAGAAAGGACTAAAGCACAGACACTTTCAGCCTTTATACTAAATAAGAGTATTTTTTGT TTTGACAGGTATATTTCATAGATACTTCATTTGTATTTACAGTATTTGAGGTTTTTGGAAAGCAAATATTATTTA TATAATTCAGCTTTCAAATCTGTTGCTGCTTTTCCTTAATCCGTGGTGTTCATGTGAAAATATGTGTTCTGTTTT TTTTTCTGCATCAGAACAATGTGAGGTCATTCTACGTTAATATCATTAATATCAGCATTTTTCATGGAAGTTTAA TGCCAAATGTAAAACACATGAAAATTTTTAAAAATTATGCTCTTTGTGTTTTGANTCATTAAACAGTAATATGTGTA AACATATAGTACATATTTAGGGCATTAGTATTCTATACTAAAGTAAAAGAGGAATATTCTGAATTTATTATTAC ATCAATTGCTCCTTAAGTAGAAAAACACTGGTCAGTTATTTAAAATACTGGCATACCTTTATAGTACAATGAAGT AGTAATCTTGGAATATTATTTG

2562/2825 FIGURE 2275

PAPVRARVSSPQLRVFRSGRPRRLRVLRINRTSVALRLAGTGRFVAKTPGHPGSWEMGLLTFRDVAVEFSLEEWE HLEPAQKNLYQDVMLENYRNLVSLGLVVSKPDLITFLEQRKEPWNVKSEETVAIQPDVFSHYNKDLLTEHCTEAS FQKVISRRHGSCDLENLHLRKRWKREECEGHNGCYDEKTFKYDQFDESSVESLFHQQILSSCAKSYNFDQYRKVF THSSLLNQQEEIDIWGKHHIYDKTSVLFRQVSTLNSYRNVFIGEKNYHCNNSEKTLNQSSSPKNHQENYFLEKQY KCKEFEEVFLQSMHGQEKQEQSYKCNKCVEVCTQSLKHIQHQTIHIRENSYSYNKYDKDLSQSSNLRKQIIHNEE KPYKCEKCGDSLNHSLHLTQHQIIPTEEKPYKWKECGKVFNLNCSLYLTKQQQIDTGENLYKCKACSKSFTRSSN LIVHQRIHTGEKPYKCKECGKAFRCSSYLTKHKRIHTGEKPYKCKECGKAFNRSSCLTQHQTTHTGEKLYKCKVC SKSYARSSNLIMHQRVHTGEKPYKCKECGKVFSRSSCLTQHRKIHTGENLYKCKVCAKPFTCFSNLIVHERIHTG EKPYKCKECGKAFPYSSHLIRHHRIHTGEKPYKCKACSKSFSDSSGLTVHRRTHTGEKPYTCKECGKAFSYSSDV IQHRRIHTGQRPYKCEECGKAFNYRSYLTTHQRSHTGERPYKCEECGKAFNYRSYLTTHRRRHTGERPYKCDECG KAFSYRSYLTTHRRSHSGERPYKCEECGKAFNSRSYLIAHQRSHTREKL

2563/2825 FIGURE 2276

GCTGGAGGAGCCTCGAGGCTGAGGCTGCCGGGGGGGCTGTGGGCTACCGGGCCGCCGGCGCCTCAGCG**ATG**TTTTA CTCAGGGCTCCTCACTGAGGGCGCCGCAAGGAGACCGACATGCGGGAGGCGGCGTCACTGCGACAGCAGCGCCG GATGAAGCAGGCGGTGCAGTTCATCCACAAGGACTCCGCCGACCTGCTGCCCCTGGACGGCCTCAAGAAGCTGGG CGGTCCCCGTGTCCCTTGGGCCTCTAAGACGAACAAACTCAATCAGGCTAAGTCTGAGGGGCTAAAGAAGTCTGA GGAGGATGACATGATTTTGGTTTCTTGCCAGTGTGCTGGAAAGGATGTGAAAGCCTTGGTTGACACAGGCTGCCT ATATAATCTCATCTCTTTGGCCTGTGTGGACAGATTGGGACTCAAGGAGCATGTCAAATCCCACAAGCATGAAGG AGAAAAGCTTTCTCTACCCCGGCATCTCAAAGTAGTGGGCCCAGATTGAGCACCTAGTGATCACACTGGGCTCCCT CCGCCTGGACTGCCCAGCAGCTGTGGTTGATGACAATGAGAAAAACTTGTCCCTTGGTCTACAGACTCTCCGATC TCTGAAGTGCATCATAAACTTGGATAAGCACCGGCTGATCATGGGGAAGACAAGGAAGAAAATCCCTTTTGT GGAGACAGTCTCTTTGAATGAAGACAACACTTCAGAAGCA**TAA**CTACAGCCTGCAGCATGTCTGCACGTGTGCAT GCATACACCCGGGTTGACAGATTGAGAAAACTGGGTTTGAACCAAATGCCGTAGTGACTTGCTGTGGACCAAGT CCTTCCATCTAATAGAAGCTCCAGGGGCTCCTTCCCATTCAGACCTCTCTAGACTATAGTCTATGCTTAGAGATC TTGTCTGGTTATGGCCATTGTTTTTTACTACTTTGATCACTTAACTTATAGACCTTTTTTTGACACTGCCAGTCTC ACTTGTGGCCTATTTCTCTGCTTCTTCCAGGAATTTGCTTTTATTAGTCAAGTATAGGGGCTGCCAGGTTCTGTG TCTCCATAGATATATGTGCTTCTTTTCCTATAGCTAAATGTATAATAAACAGGAACCTGACCTTTACCTCCTTTC AGCTGTTTCAAACAGGTGCCAGGATACCTATGTCTTAGAATTAGAGTTTCTTCAAATTGATTCATTGATTTCTCA AGTATGGATTATGTGAAAGAGCCCAGGGACATTATCCATTACAGTCTAACTCTTTCATTTAAAGGTCCAGAGAGG CAAGTGAATTGTCTAAGTTCATATTATGGTCAGTGACTGAAGGGACCAAGAACGCAGACCTGATTTCCAAGCCA AAAAAAA

2564/2825 FIGURE 2277

 $\label{teggrketdmreaaslrqqrrmkqavqfihkdsadllpldglkklgsskdmqphnilqrrlmetnlsk\\ LRSGPRVPWASKTNKLNQAKSEGLKKSEEDDMILVSCQCAGKDVKALVDTGCLYNLISLACVDRLGLKEHVKSHK\\ HEGEKLSLPRHLKVVGQIEHLVITLGSLRLDCPAAVVDDNEKNLSLGLQTLRSLKCIINLDKHRLIMGKTDKEEI\\ PFVETVSLNEDNTSEA$

2565/2825 FIGURE 2278A

AAAATACTTGCCCTTTGGAAAAAAATCATTCTGGCGTCCACATTCAGACTGGTTTAGAGGAGAGTAATACTGAAG ACATGCCCCCCGAATCAAGGTAGCAATTGCGGAGATGAAAAGAATGAGTCCAAAAGATGCTTAAATGTGACCA TAGTTAAATAGGAAACTGGAAGAAGCAGGCTTGCAAGAATGGTAATATTTTGGACGTGTAACTTGTCTGGCAA GATGTTGAAGAGGTAAAGGAGGCAGCACAGCATCATGGGCCTTGGAGGCAGAAGCCGCTTTGATTTACTCAGAAC CTTGTTCTGCTGTTGCTGAATATAATGGGGATGCCAGGGCAGACATACCATTCAACTTGAATCTTCCTTACCCAC TTTGTATAGTCTTACATGTCATTGATACCTTGTTTTCTGGTACGCCTAAAAGGAGTAGAACTTCAAGTGGTATTT ATCCAAATTTTTAAAAGAAGGGATCTTATTTTTAAAACGAAGATCGATAATATCTACTATGTACTAAATGTCATT ACAGTATTAAACCTGGACAGGGAGAGGGGGGGTGTTAGAGAATGAGAGGGGAAAGAGAGAGAATACCTACATATAA GGTGACCCTAAAGAAAAGCCTTTCACCCTTCGGAAGATCTTTTCATTTTCATTTTTCTTTTTTCAAACACCAACT TGTACCAGAGGGAAGATCTTTTTTTAAAAGCGTTTCACTAAAATTTGTAAGGAAATAATGAGCTAGATAAAATAT TACAGTGTTTATTTAATGAATTTACTCATATTTAAAATAATATCTAAAAAGAGTAATTTAGGAATATTGAGGCAA TGAGACTTGAAGGTTATAAATAGTGGCAGTGAGAAAAGGAATATTATAGATAAGCTGTTGAAAAAGAAAAGATGCT TCCTTTGTGGACTCATTGTGTCTCTTTCCTTAGGCTAATAGTCACCATTTATCATGGACGGTTGTCATGAGTGTTG AAGCACACTTAACCTGCTTCGTCAGAGGGTACTTGGCATCACCGGTGCACAGCTGGTGTCCTAGCAGGAGACTAA CTAGCTGACACCCGTGCTTTGTTAGCCTAATAATCTTATTTGTTAAAACTTGCCATTTGTTGGATTTTTCTATT TTACCCCATTATAAACTTCTTATTGAGATCAGATGACTTCTGAATAGCATTTGCTGTATTTTTCCAAGGTAAAGA ${\tt ATATCTTTTCAGATTTTTCTTTCTTTA} \underline{{\tt ATG}} {\tt TCAGAAATAGAAGAAATCTTTTCTACCGACCTTGTGCCAG}$ GAGATGTCATGGTCATTCCATTAAATGGGACAATAATGCCTTGTGATGCTTGTTGATTAATGGTACCTGCATTG TAAACGAAAGCATGTTAACAGGAGAAAGTGTTCCAGTGACAAAGACTAATTTGCCAAATCCTTCAGTGGATGTGA AAGGAATAGGAGATCAATTATAATACCGGAAACACATAAACGACATACTTTGTTTTTGTGGGACAACTGTTATTC AGACTCGTTTCTACACTGGAGAACTCGTCAAAGCCATAGTTGTTAGAACAGGATTTAGTACTTCCAAAGGACAGC TTGTTCGTTCCATATTGTATCCCAAACCAACTGATTTTAAACTCTACAGAGATGCCTACTTGTTTCTACTATGTC TTGTGGCAGTTGCTGGCATTGGGTTTATCTACACTATTATTAATAGCATTTTAAATGAGGTACAAGTTGGGGTCA TAATTATCGAGTCTCTTGATATTATCACAATTACTGTGCCCCCTGCACTTCCTGCTGCAATGACTGCTGGTATTG TCAATCTTGTTTGCTTTGACAAGACTGGAACTCTAACTGAAGATGGTTTAGATCTTTTGGGGGGATTCAACGAGTGG AAAATGCACGATTTCTTTCACCAGAAGAAAATGTGTGCAATGAGATGTTGGTAAAATCCCAGTTTGTTGCTTGTA TGGCTACTTGTCATTCACTTACAAAAATTGAAGGAGTGCTCTCTGGTGATCCACTTGATCTGAAAATGTTTGAGG CTATTGGATGGATTCTGGAAGAAGCAACTGAAGAAGAAACAGCACTTCATAATCGAATTATGCCCACAGTGGTTC GTCCTCCCAAACAACTGCTTCCTGAATCTACCCCTGCAGGAAACCAAGAAATGGAGCTGTTTGAACTTCCAGCTA CTTATGAGATAGGAATTGTTCGCCAGTTCCCATTTTCTTCTGCTTTGCAACGTATGAGTGTGGTTGCCAGGGTGC TGGGGGATAGGAAAATGGACGCCTACATGAAAGGAGCGCCCGAGGCCATTGCCGGTCTCTGTAAACCTGAAACAG TTCCTGTCGATTTTCAAAACGTTTTTGGAAGACTTCACTAAACAGGGCTTCCGTGTGATTGCTCTTGCACACAGAA AATTGGAGTCAAAACTGACATGGCATAAAGTACAGAATATTAGCAGAGATGCAATTGAGAACAACATGGATTTTA TGGGATTAATTATAATGCAGAACAAATTAAAGCAAGAACCCCCTGCAGTACTTGAAGATTTGCATAAAGCCAACA TTCGCACCGTCATGGTCACAGGTGACAGTATGTTGACTGCTGTCTCTGTGGCCAGAGATTGTGGAATGATTCTAC CAGACTCCCTCACGCAGTGCAGTCATCCATCAGCAATTGACCCAGAGGCTATTCCGGTTAAATTGGTCCATGATA TTCAAGACCTTGTTCCTAAGTTGATGTTGCATGGCACCGTGTTTGCCCGTATGGCACCTGATCAGAAGACACAGT TGATAGAAGCATTGCAAAATGTTGATTATTTTGTTGGGATGTGTGGTGATGGCGCAAATGATTGTGGTGCTTTGA

2566/2825 FIGURE 2278B

AGAGGGCACACGGAGGCATTTCCTTATCGGAGCTCGAAGCTTCAGTGGCATCTCCCTTTACCTCTAAGACTCCTA GTATTTCCTGTGTGCCAAACCTTATCAGGGAAGGCCGTGCTGCTTTAATAACTTCCTCCTGTGAATTAGCACTAT TTTCTATAGTTACTTATTCTCTGGATCATTTTATAATTTCCATATTAATTTCAAGTATGCTCGTGTTATTCTTCA $\texttt{GTGATTTCCACAATTGTGCATTTTATTCTTTGGTT} \underline{\textbf{TAA}} \\ \texttt{GTACTGAAGCATATAATGAAAGTAATTGCTAAGTAGC} \\$ AGCTTAAAAATTCAATTATCCGATTGTATTTAACATCTTTAAGAGCATGATCATAAAGAGCTATTTTTGACACCC CCCCCCACTTTTTTAACATTTAGAGTTAGTAAGGGTTTTATATCTCTTCTGTCCATATTGTTTTCAAAGGAATG AGGTGTTTAGGTGGCTGGAAAAGCATTTGTAGGAAGTTAGATTTGAATATAGACAAGGTGGGTTATTCACGTTGA CGTAGGTTACCATTACATAGTAATTTTGATTCTGAATTTCACATTAAATTATTTGAGTTTATACAGACCTAAATT ATGTTTTGTATCTTCTAGCACCAACTGCTGTAAAGCAATGCTGCAAATAATGCTTGAATACAAGTGGCTAAGCCA ACAACAGAATAAATACTTTTATAGTAGTTTTTATAATCCTGAAATTCGAAAGCTTTCCCAATTGCACTTGCATCTA AACAAAACTGTTGCAGTTTTACTCTATTTATTTTGTTCCCCATGTTTATGAAAGTCCTGCACAGTTTCAAAGGC ATGGTAAATAATATCAATGTTTATGTAGTCTGTTACAGAAACAGCTATAGATAACATTATCCAGTGAAGAGCA AAATTCAAGCTTTAGAAAATATTCATGCATGCAATTTTGACATATCTAAAAATAGGTTTTTGTATATTTATGGTG GGAGGTGGTTGGGAACTTTTAACAAAATGGGGTGTTAATTTTTGTACAGTCTGTGGGCATTTACACATTTTTAAT $\verb|GTATTAAAATTTGGTAATTATGTGTACATTAAATTAATAAAAGTTACTTCTAGTTATGATTTGTGAATTCCCTAA|$ GACCTTGGATTTTTTAAGTAACTTTATATCAGAAATGATACTGCATCTTTATATTTTTAAAATTGTATTGCTGC TCAAGAATGGTACCCTCTTGTCAAAAAGGCATACATTCATAATTGTACATTCAGCATTGTAAATAATCTTATGAA

2567/2825 FIGURE **2279**

MSEIEEIFSTDLVPGDVMVIPLNGTIMPCDAVLINGTCIVNESMLTGESVPVTKTNLPNPSVDVKGIGDQLYNPE
THKRHTLFCGTTVIQTRFYTGELVKAIVVRTGFSTSKGQLVRSILYPKPTDFKLYRDAYLFLLCLVAVAGIGFIY
TIINSILNEVQVGVIIIESLDIITITVPPALPAAMTAGIVYAQRRLKKIGIFCISPQRINICGQLNLVCFDKTGT
LTEDGLDLWGIQRVENARFLSPEENVCNEMLVKSQFVACMATCHSLTKIEGVLSGDPLDLKMFEAIGWILEEATE
EETALHNRIMPTVVRPPKQLLPESTPAGNQEMELFELPATYEIGIVRQFPFSSALQRMSVVARVLGDRKMDAYMK
GAPEAIAGLCKPETVPVDFQNVLEDFTKQGFRVIALAHRKLESKLTWHKVQNISRDAIENNMDFMGLIIMQNKLK
QEPPAVLEDLHKANIRTVMVTGDSMLTAVSVARDCGMILPQDKVIIAEALPPKDGKVAKINWHYADSLTQCSHPS
AIDPEAIPVKLVHDSLEDLQMTRYHFAMNGKSFSVILEHFQDLVPKLMLHGTVFARMAPDQKTQLIEALQNVDYF
VGMCGDGANDCGALKRAHGGISLSELEASVASPFTSKTPSISCVPNLIREGRAALITSSCELALFSIVTYSLDHF
IISILISSMLVLFFSDFHNCAFYSLV

2568/2825 FIGURE **2280**

GGAGTTGAGAATTAGGGAGGGGGTGGTAGAGTCCGGGTAGTGAGCGGAGGGACAGGAAGGGTAGGGCAAGAAAGG GGAGCCAGGATGCCCGCGCCCCCGCGCGCCCCGGGAGCAGCCCCGCGTGCCCGGGGAGCGCCAGCCGCTGCTCGC GCCTTCTTCGGCGTCACCGCCAACCTCGTGCTGTACCTCAACAGCACCAACTTCAACTGGACCGGCGAGCAGGCG $\tt CTGGGCCGCTACCGCGGGTCGCGCTCAGCCTGCTGCTCTACCTGGCCGCCTCGGGCCTGCTGCCCGCCACCGCC$ TGCCGCGCTCCTCGCCCAGCCCCTACTGCGCGCCCGTCCTCTACGCGGGCCTGCTACTCGGCCTGGCCGCC AGCTCCGTCCGGAGCAACCTCACCTCCTTCGGTGCCGACCAGGTGATGGATCTCGGCCGCGACGCCACCCGCCGC TTCTTCAACTGGTTTTACTGGAGCATCAACCTGGGTGCTGTGCTGTCGCTGCTGGTGGTGGCGTTTATTCAGCAG AACATCAGCTTCCTGCTGGGCTACAGCATCCCTGTGGGCTGTGTGGGCCTGGCATTTTTCATCTTCCTCTTTGCC TGCCCCCAGCTGTGGCAACGACACTCGGCCAGAGACCGTCAATGTGCCCGCGTGCTGGCCGACGAGAGGTCTCCC $\tt CAGCCAGGGGCTTCCCCGCAAGAGGACATCGCCAACTTCCAGGTGCTGGAGAGATCTTGCCCGTCATGGTGACC$ CTGGTGCCCTACTGGATGGTCTACTTCCAGATGCAGTCCACCTATGTCCTGCAGGGTCTTCACCTCCACATCCCA GCCTGGCTCCTCCTGGCCAATGTTGTGGTGGTGCTGATTCTGGTCCCTCTGAAGGACCGCTTGATCGACCCTTTA CTGCTGCGGTGCAAGCTGCTTCCCTCTGCTCTGCAGAAGATGGCGCTGGGGATGTTCTTTGGTTTTACCTCCGTC ATTGTGGCAGGAGTCCTGGAGATGGAGCGCTTACACTACATCCACCACAACGAGACCGTGTCCCAGCAGATTGGG GAGGTCCTGTACAACGCGGCACCACTGTCCATCTGGTGGCAGATCCCTCAGTACCTGCTCATTGGGATCAGTGAG ATCTTTGCCAGCATCCCAGGCCTGGAGTTTGCCTACTCAGAGGCCCCGCGCTCCATGCAGGGCGCCATCATGGGC ATCTTCTTCTGCCTGTCGGGGGTGGGCTCACTGTTGGGCTCCAGCCTAGTGGCACTGCTGTCCTTGCCCGGGGGC AGCCCTTCCTCCC

2569/2825 FIGURE 2281

MPAPRAREQPRVPGERQPLLPRGARGPRRWRRAAGAAVLLVEMLERAAFFGVTANLVLYLNSTNFNWTGEQATRA ALVFLGASYLLAPVGGWLADVYLGRYRAVALSLLLYLAASGLLPATAFPDGRSSFCGEMPASPLGPACPSAGCPR SSPSPYCAPVLYAGLLLLGLAASSVRSNLTSFGADQVMDLGRDATRRFFNWFYWSINLGAVLSLLVVAFIQQNIS FLLGYSIPVGCVGLAFFIFLFATPVFITKPPMGSQVSSMLKLALQNCCPQLWQRHSARDRQCARVLADERSPQPG ASPQEDIANFQVLVKILPVMVTLVPYWMVYFQMQSTYVLQGLHLHIPNIFPANPANISVALRAQGSSYTIPEAWL LLANVVVVLILVPLKDRLIDPLLLRCKLLPSALQKMALGMFFGFTSVIVAGVLEMERLHYIHHNETVSQQIGEVL YNAAPLSIWWQIPQYLLIGISEIFASIPGLEFAYSEAPRSMQGAIMGIFFCLSGVGSLLGSSLVALLSLPGGWLH CPKDFGNINNCRMDLYFFLLAGIQAVTALLFVWIAGRYERASQGPASHSRFSRDRG

2570/2825 FIGURE 2282

AACATTCCTGCAAATGGTTTCAATATATGCAGATGTCTCGATATAGGAATGAAATTACGTCTTTGGAACAACTTA CCATGCAAGGAATGGAACAGGCCATGCCAGGGGCTGGCCCTGGTGTGCCCCAGCTGGGAAACATGGCTGTCATAC ATTCACATCTGTGGAAAGGATTGCAAGAGAAGTTCTTGAAGGGAAACCCAAAGTCCTTGGGGTTGTGCAGATTC TGACTGCCCTGATGAGCCTTAGCATGGGAATAACAATGATGTGTATGGCATCTAATACTTATGGAAGTAACCCTA TTTCCGTGTATATCGGGTACACAATTTGGGGGTCAGTAATGTTTATTATTTCAGGATCCTTGTCAATTGCAGCAG ATAATTGTCATGGGACTATGTCCATCTTAATGGGTCTGGATGGCATGGTGCTCCTCTTAAGTGTGCTGGAATTCT GCATTGCTGTGTCCCTCTCTGCCTTTGGATGTAAAGTGCTCTGTTGTACCCCTGGTGGGGGTTGTGTTAATTCTGC CATCACATTCTCACATGGCAGAAACAGCATCTCCCACACCACTTAATGAGGTT**TGA**GGCCACCAAAAGATCAACA GACAAATGCTCCAGAAATCTATGCTGACTGTGACACAAGAGCCTCACATGAGAAATTACCAGTATCCAACTTCGA TCAAAATTATGTTCTCATTTTTTTCCCTGGAACTCAATAACTCATTTCACTGGCTCTTTATCGAGAGTACTAGAA CTTGAAGTAGCACAGTCCGTCCTTGCATGTGCACGAGCTATCATTTGAGTAAAAGTATACATGGAGTAAAAATCA TATTAAGCATCAGATTCAACTTATATTTTCTATTTCATCTTCCTTTCCCTTCTCCCACCTTCTACTGGGCAT

2571/2825 FIGURE 2283

 $\label{thm:cmasntygs} $$ \texttt{MTTMQGMEQAMPGAGPGVPQLGNMAVIHSHLWKGLQEKFLKGEPKVLGVVQILTALMSLSMGITMMCMASNTYGS} $$ \texttt{NPISVYIGYTIWGSVMFIISGSLSIAAGIRTTKGLVRGSLGMNITSSVLAASGILINTFSLAFYSFHHPYCNYYG} $$ \texttt{NSNNCHGTMSILMGLDGMVLLLSVLEFCIAVSLSAFGCKVLCCTPGGVVLILPSHSHMAETASPTPLNEV} $$$

2572/2825 FIGURE 2284

GTGCTCTGCACCCAGCTCCTTCCCGGGCGCGCACACGCGCTTCCTCTTTGAGCTCCCGGGGCGTCCGGAGGCGAA GGTCCCGGAGCGTTCACGAGAATCCGGGTCCCGGCGAGTCCGGGGTCCGCTCCTCCAGCTGCGCCCAGGGCGCAC ${\tt GAGCCGGCCAGCCTCGGGGAGAGGGCGCGGGGGGCGCTGGGGGTTCTTACGGGAAG} {\color{red} {\bf ATG}} {\tt AGGAAGCCCGACAGCAA}$ GATCGTGCTCCTGGGGGACATGAACGTGGGGAAGACGTCGCTGCTGCAGCGGTATATGGAGCGGCGCTTCCCGGA CACGGTCAGCACGGTGGGCGCCCTTCTACCTGAAGCAGTGGCGCTCCTACAACATCTCCATCTGGGACACCGC TCCCAATATGGACGCTGGGGACCGTGTCTCCCCAAGGGCACCTAAGCAGGTGCAGCTGGAGGATGCGGTGGCCCT CAGCGCCAAGACCGGCTACAATGTGGACCTCCTGTTTGAGACCCTCTTTGACCTGGTGGTGCCAATGATCTTACA GCAGAGAGCTGAGAGGCCGTCACACACAGTGGATATATCCAGTCATAAGCCACCCAAGAGGACCAGATCTGGGTG TCTGAAAGGAGCAAGGAACAGCAAGGAATTATTTTCCAGAATGACACCCGCAGCAGAATGTTGGAGTGGAAATGA TGGCTGGCTATGAAGAGGAGGTCAACGTGTGTGGTCTCCTCAGTCTCTGTCAGAGGGGTGGGGAGGTGGGAAACA GGAATCCTCTGCAAAGCCCAATCTGCAGAGTCGAGACCCCTGGTGCTCTCTGCCCCGCTGCCTGGCACTGGTCCT TTGCAGCCAGCCACCAACGGCCCCCTTGCCCTTGCAGAGGCAGAAGCCTGCGTCTGCACCTGCACCTCTGACCGT TTCAGCACCCTGGGTTGTTACCACGTCCTACAACTCTGACATTTCTTGTTCTCAAGCGTTTCTCTTCACTGTGAG TTGTCTTTGGTCCTCCCACTTGGTACTTGTATCTTGATGCTTTATAATCCTGACTCTCGACGTGTTCATTTATAC AAAATCAGGAATAACTTTGTTTTTATACTGATTGCAGCAATGTTGGCTACATGTATTATTAAAGAGGATTTTTGG AACAACTTAAAAAAAAAAAAAAAAAAAAAA

2573/2825 FIGURE 2285

 $\label{thm:converga} \\ \text{MRKPDSKIVLLGDMNVGKTSLLQRYMERRFPDTVSTVGGAFYLKQWRSYNISIWDTAGREQFHGLGSMYCRGAAA}\\ \text{IILTYDVNHRQSLVELEDRFLGLTDTASKDCLFAIVGNKVDLTEEGALAGQEKEECSPNMDAGDRVSPRAPKQVQLEDAVALYKKILKYKMLDEQDVPAAEQMCFETSAKTGYNVDLLFETLFDLVVPMILQQRAERPSHTVDISSHKPPKRTRSGCCA}\\ \text{KRTRSGCCA}$

2574/2825 FIGURE **2286**

TTTAGTTTAAAAAGAAAAATGCAGGGTGATTTCTTATTATTATTATTAGCCTGCATGGTTAAATTCGACAACT TGTAACTCTATGAACTTAGAGTTTACTATTTTAGCAGCTAAAAATGCATCACATATTCATATTGTTCAATAATGT $\verb| CCTTTCATTTGTTTCTGATTGTTTTCATCCTGATACTGTAGTTCACTGTAGAAATGTGGCTGCTGAAACTCATTT| \\$ GATTGTCATTTTATCTATCCTATGTTAAATGGTTTGTTTTTACAAAATAATACCTTATTTTAATTGAAACGTTT TACTCACCTGCGTTTTCATTTGTTTGACATTTGTCTATTATTGGATTTCATTATCATATGAACTTGTCAGTGGGA AACAAACTGTCTAAAAATTTTTCTCTTACGTTTAACATACAATCATGTGAAATTTTAGGCAGAGTTCGATAAATTA CTGGCAAAAACAAAACTCTTTTATAAAGATTTTCTAATGTTGACTTTAATACTCTAACATGGTACAAACCAAATG ATTAAATCTTGAACTTTATAAAACATGTACAAAAATTGTACAAGATAAGTTCCACCTGGTAATGTCTTTCCCTAA TACAGGGTTGCGCTTGCATTGGACCCTAGGGATTTGCACTAAAATTATATCAAGGTCTCAGATGAGCTTAGTGCA CAAGCACTATCACTTTAAATACTATTATTTGCTACCACAGCAACTATATATTTCCATAGCTTTTGGCTGGGGGCG ATTAAATTTTAAGTACTTTGCTGAATGTCATTTTAAAGCATGTTTGAAGTCTTGTGTATTTGTCTGTGTTAATGC TGTCAGGAGGAACTGACTAAGATGTTTTAATATGTATCAAAAATTAAAATGATTTTTTT

2575/2825 FIGURE 2287

 ${\tt MKIFYCALNLELYKTCTKIVQDKFHLVMSFPNTGLRLHWTLGICTKIISRSQMSLVHKHYHFKYYYLLPQQLYIS} \\ {\tt IAFGWGRGTFLLQLEIALLVSYLFVVFKKYIVVRVIFSIYFIPGGDHATLSKEN}$

2576/2825 FIGURE 2288

CGGCGAAGCGACTCCGATCCTCCCTCTGAGCCTTGCTCAGCTCTGCCCCGCGCCTCCCGGGCTCCGGGTCCGCGCG ${\tt GCGGGGTCCCTGCTCCTGCGCCCCGGGCGCGCTTCCCGGACACCCCGGTCCCCGCAGCCAGGACAAAGCC{\tt ATGAA}}$ CCTGGTCATCTTCTATTTCCAAAGTATGTTGCACCCAGTCATGCGGAGGAATCCCTTTGGTGTGGACATCTGCTG CCGGAAGGGGTCCCGAAGCCCCTGCAGGAACTCTACAACCCAATCCAGCTGGAGCTCTCAAACACTGCTGTCCT GCACCAGATGCGGCGGGACCAGGTGACAGACACGTGCCGAGCCAACAGCCGCACAAGCCGTAAGCGGAGGGTGCT GACCCCCAACGACCTGAAGCACTTGGTGGTGGATGAGGACCACGAGCTCATCTACTGCTACGTGCCCAAGGTGGC CAACGAGGCACACGTCTCCGCCAACCTGAAGACCCTGAACCAGTACAGCATCCCAGAAATCAACCACCGCTTGAA AAGCTACATGAAGTTCCTGTTTGTCCGGGAGCCCTTCGAGAGGCTAGTGTCCGCCTACCGCAACAAGTTCACCCA GAAGTACAACATCTCCTTCCACAAGCGGTACGGCACCAAGATCATCAAACGCCAGCGGAAGAACGCCACCCAGGA GGCCCTGCGCAAAGGGGACGATGTCAAATTCGAGGAGTTTGTGGCCTATCTCATCGACCCACACACCCCAGCGGGA CAAGTACGAGACACTGGAAGAGGATTCTAATTACGTCCTGCAGCTGGCAGGAGTGGGCAGCTACCTGAAGTTCCC CACCTATGCAAAGTCTACGAGAACTACTGATGAAATGACCACAGAATTCTTCCAGAACATCAGCTCAGAGCACCA AACGCAGCTGTACGAAGTCTACAAACTCGATTTTTTAATGTTCAATTACTCAGTGCCAAGCTACCTGAAATTGGA TATTGGGTTATTTTGTAAATTAATATTTCTTTGGGGATGATGCTGCGAGCAGCATAGTGAGAATTATTTAAAATC CTTCGTAGGGAAGGACAGCTGTCTTTGCAGGGGAAATAGGATGGGTCGTTCTTGTCTGTAGAAGTGAATACTGCA

2577/2825 FIGURE 2289

MKPALLEVMRMNRICRMVLATCLGSFILVIFYFQSMLHPVMRRNPFGVDICCRKGSRSPLQELYNPIQLELSNTA VLHQMRRDQVTDTCRANSATSRKRRVLTPNDLKHLVVDEDHELIYCYVPKVACTNWKRLMMVLTGRGKYSDPMEI PANEAHVSANLKTLNQYSIPEINHRLKSYMKFLFVREPFERLVSAYRNKFTQKYNISFHKRYGTKIIKRQRKNAT QEALRKGDDVKFEEFVAYLIDPHTQREEPFNEHWQTVYSLCHPCHIHYDLVGKYETLEEDSNYVLQLAGVGSYLK FPTYAKSTRTTDEMTTEFFQNISSEHQTQLYEVYKLDFLMFNYSVPSYLKLE

2578/2825 FIGURE 2290

GAGGGCGCGCGCCTCCAGCCCTCGCCCGCGTCCCCGGCCGCGCGTGATGCGCGCGGACCAGCCCGCGACGCCCC $\texttt{CGGCCCAGGCTTCCGGCGGGGGGGCCCTCGCTCTCC} \underline{\textbf{ATG}} \texttt{GGGCTGAGGGACTGGCTGAGAACCGTGTGCT}$ ATTCCTCATTTGGAGCAACTCTGGTGAGGGATGATGAGAAGAATTTATGGAGTATGCCCCCATGATGTCCCCACA CAGAGGCAGACGACAGAACCCTGTACAATTTGATAGTCATTCGTAATCAGCAGGCCAAAGACTCAGAGGAGT GGCAGAAGCTCAACTATGATATCCATACCCTGCGGCAGGTTCGAAGGGAAGTAAGAAACAGATGGAAGTGCATCT TAGAAGATTTAGGTTTTCAAAAGGAAGCTGACTCTTTGTTGTCAGTGACTAAACTCAGCACCATCAGTGATTCTA AAAACACAAGGAAAGCTCGAGAGATGTTGTTAAAACTGGCTGAAGAAACCAGTATTTTCCCAACAAGTTGGGAGC TCTCAGAGAGATATCTCTTTGTTGTGGACCGTCTCATTGCACTTGATGCTGCAGAAGAGTTCTTTAAGCTTGCTC ${ t TCTCATGCAGACTTGCACATATGCAGGGAGTATTGCAC}{ t TGA}$ AGATCTTTGCTGGACCTTCTTCTCTCAGAAGAT ACTTGCCACTTAAGCAAGGAACTTGTCAAGAGATCATGGTTCATGTTACTGAAAAGACTTTAAGGATTTGTAAGG TTAATCCATAGATTGCTGAGAACAATGGAAATATTTTTATTTTTACAGATTTTGCACTTCTGAATTCAGGTTAAA AACTAACTTGTATTTAGTCTGCTTAGAGGACTGTGACTTGAAAATTTTTATATACCAATGAGCTTTTTGGTAGCG TCCACAATGTTTAAAATATTTCATAGGCGAGATCCGTGTTCTCCATTTATTAATGCATTGTAGACCAATTTAACT TTTGCCTCATGTTATGTAAAATTAGCCTGCAGATATTTTCTCTCAATTCTGTAGACTCTCGCAAGATAAACATTC AAACAGTGAAACAAACAATAAAATAAATAAACCT

2579/2825 FIGURE **2291**

 ${\tt MGLRDWLRTVCCCCRCECLEERALPEKEPLVSDNNPYSSFGATLVRDDEKNLWSMPHDVSHTEADDDRTLYNLIV} \\ {\tt IRNQQAKDSEEWQKLNYDIHTLRQVRREVRNRWKCILEDLGFQKEADSLLSVTKLSTISDSKNTRKAREMLLKLAEETSIFPTSWELSERYLFVVDRLIALDAAEEFFKLARRTYPKKPGVPCLADGQKELHLWGDLSCRLAHMQGVLHETSIFPTSWELSERYLFVVDRLIALDAAEEFFKLARRTYPKKPGVPCLADGQKELHLWGDLSCRLAHMQGVLHETSIFPTSWELSERYLFVVDRLIALDAAEEFFKLARRTYPKKPGVPCLADGQKELHLWGDLSCRLAHMQGVLHETSIFPTSWELSERYLFVVDRLIALDAAEEFFKLARRTYPKKPGVPCLADGQKELHLWGDLSCRLAHMQGVLHETSIFPTSWELSERYLFVVDRLIALDAAEEFFKLARRTYPKKPGVPCLADGQKELHLWGDLSCRLAHMQGVLHETSIFPTSWELSERYLFVVDRLIALDAAEEFFKLARRTYPKKPGVPCLADGQKELHLWGDLSCRLAHMQGVLHETSIFPTSWELSERYLFVVDRLIALDAAEEFFKLARRTYPKKPGVPCLADGQKELHLWGDLSCRLAHMQGVLHETSIFPTSWELSERYLFVVDRLIALDAAEEFFKLARRTYPKKPGVPCLADGQKELHLWGDLSCRLAHMQGVLHETSIFPTSWELSERYLFVVDRLIALDAAEEFFKLARRTYPKKPGVPCLADGQKELHLWGDLSCRLAHMQGVLHETSIFPTSWELSERYLFVVDRLIALDAAEEFFKLARRTYPKKPGVPCLADGQKELHLWGDLSCRLAHMQGVLHETSIFPTSWELSERYLFVVDRLIALDAAEEFFKLARRTYPKTSWELSERYLFVVDRLIALDAAEEFFKLARRTYPKTSPTSWELSERYLFVVDRLIALDAAEEFFTSWELSERYLFVVDRLIALDAAEEFFTSWELSERYLFVVDRLIALDAAEEFFTSWELSERYLFVVDRLIALDAAEEFFTSWELSERYLFTSWELSERYLFVVDRLIALDAAEEFFTSWELSERYLFTSWELSERY$

2580/2825 FIGURE 2292

2581/2825 FIGURE 2293

 $\label{topic} {\tt MGRLTEAAAAGSGSRAAGWAGSPPTLIPLSPTSPRCAATMASSDEDGTNGGASEAGEDREAPGKRRRLGFLATAW LTFYDIAMTAGWLVLAIAMVRFYMEKGTHRGLYKSIQKTLKFFQTFALLEIVHCLIGIVPTSVIVTGVQVSSRIF MVWLITHSIKPIQNEESVVLFLVAWTVTEITRYSFYTFSLLDHLPYFIKWARYNFFIILYPVGVAGELLTIYAAL PHVKKTGMFSIRLPNKYNVSFDYYYFLLITMASYIPLFPQLYFHMLRQRRKVLHGEVIVEKDD$

2582/2825 FIGURE 2294

AGAAACCGTTGATGGGACTGAGAAACCAGAGTTAAAACCTCTTTGGAGCTTCTGAGGACTCAGCTGGAACCAACG GGCACAGTTGGCAACACCATCATGACATCACAACCTGTTCCCAATGAGACCATCATAGTGCTCCCATCAAATGTC ATCAACTTCTCCCAAGCAGAAACCCGAACCCACCAACCAGGGGCAGGATAGCCTGAAGAAACATCTACACGCA GAAATCAAAGTTATTGGGACTATCCAGATCTTGTGTGGCATGATGGTATTGAGCTTGGGGATCATTTTGGCATCT GCTTCCTTCTCCAAATTTTACCCAAGTGACTTCTACACTGTTGAACTCTGCTTACCCATTCATAGGACCCTTT TTTTTATCATCTCTGGCTCTCTATCAATCGCCACAGAGAAAAGGTTGACCAAGCTTTTGGTGCATAGCAGCCTG CCTGCCTCACTGCAGTGTGAGTTGGACAAAAATAATATACCAACAAGAAGTTATGTTTCTTACTTTATCATGAT AGTGTGCTGGCCGGCTTCACTTAACCTTGCCTAGTGTATCTTATCCCTGCACTGTGTTGAGTATGTCACCAAGAG TGGTAGAAGGAACAACCAGCCAATCACGAGATCACATGGGAGGGCATTTGCATTGTGATGGAAGACAGAGAAGAA AAGCAGATGGCAATTGAGTAGCTGATAAGCTGAAAATTCACTGGATATGAAAATAGTTAATCATGAGAAATCAAC TGATTCAATCTTCCTATTTTGTCAGCGAAGGGAATGAGACTCTGGGAAGTTAAATGACTGGCCTGGCATTATGCT ATGAGTTTGTGCCTTTGCTGAGGACACTAGAACCTGGCTTGCCTCCCTTATAAGCAGAAACAATTTCTGCCACAA $\verb|CTCTGCATTTGCCCCTGGTGATCTTAAAATTCGTTTGCCTTTTTAAAGCTATATTAAAAATGTATTGTTGAATCA|\\$ AAAAAAAAAAAA

2583/2825 FIGURE 2295

MTSQPVPNETIIVLPSNVINFSQAEKPEPTNQGQDSLKKHLHAEIKVIGTIQILCGMMVLSLGIILASASFSPNF TQVTSTLLNSAYPFIGPFFFIISGSLSIATEKRLTKLLVHSSLVGSILSALSALVGFIILSVKQATLNPASLQCE LDKNNIPTRSYVSYFYHDSLYTTDCYTAKASLAGSLSLMLICTLLEFCLAVLTAVLRWKQAYSDFPGVSVLAGFT

2584/2825 FIGURE 2296

GCTTCCCGGAAGTGGCGGCGGTCAGGGCTGGCCTTGGCTTCAGCTGCGGTTTTGGGGTCCCGGACTCTGGGAT CGGCGGCGCTATGAGTTCTTTCGAGGGGCAGATGGCCGAGTATCCAACTATCTCCATAGACCGCTTCGATAGGGAGAACCTGAGGGCCCGCCCTACTTCCTGTCCCACTGCCACAAAGATCACATGAAAGGATTAAGAGCCCCTACCTT GAAAAGAAGGTTGGAGTGCAGCTTGAAGGTTTATCTATACTGTTCACCTGTGACTAAGGAGTTGTTAACGAG AAGGAGAAGCTGCTAGAATGGAGCTTCTGCACTCCGGGGGCAGAGTCAAAGACATCCAAAGTGTATATTTGGATA CTACGTTCTGTGATCGAAGATTTTACCAAATTCCAAGTCGGGAGGAGTGTTTAAGTGGAGTCTTAGAGCTGGTCC GAAGCTGGATCACTCGGAGCCCGTACCATGTTGTGTGGCTGAACTGCAAAGCGGCTTATGGCTATGAATATCTGT TCACCAACCTTAGTGAAGAATTAGGGGTCCAGGTTCATGTGAATAAGCTAGACATGTTTAGGAACATGCCTGAGA AGTGGAGCAAATTACCCTGTGGAATTACTTCCAGAAATAGAATTCCACTCCACATAATCAGCATTAAGCCATCCA CCATGTGGTTTGGAGAAAGGAGCAGAAAAACAAATGTAATTGTGAGGACTGGAGAGAGTTCATACAGAGCTTGTT TTTCTTTTCACTCCTCCTACAGTGAGATTAAAGATTTCTTGAGCTACCTCTGTCCTGTGAACGCATATCCAAATG TCATTCCAGTTGGCACAACTATGGATAAAGTTGTCGAAATCTTAAAGCCTTTATGCCGGTCTTCCCAAAGTACGG AGCCAAAGTATAAACCACTGGGAAAACTGAAGAGAGCTAGAACAGTTCACCGAGACTCAGAGGAGGAAGATGACT ATCTCTTTGATGATCCTCTGCCAATACCTTTAAGGCACAAAGTTCCATACCCGGAAACTTTTCACCCTGAGGTAT TTTCAATGACTGCAGTATCAGAAAAGCAGCCTGAAAAACTGAGACAAACCCCAGGATGCTGCAGAGCAGAGTGTA TGCAGAGCTCTCGTTTCACAAACTTTGTAGATTGTGAAGAATCCAACAGTGAAAGTGAAGAAGAAGTAGGAATCC CAGCTTCACTGCAAGGAGATCTGGGCTCTGTACTTCACCTGCAAAAGGCTGATGGGGATGTACCCCAGTGGGAAG TATTCTTTAAAAGAAATGATGAAATCACAGATGAGAGTTTTGGAAAACTTCCCTTCCTCCACAGTGGCAGGGGGAT CTCAGTCACCAAAGCTTTTCAGTGACTCTGATGGAGAATCAACTCACATCTCCCCAGAATTCTTCCCAGTCAA CACACATAACAGAACAAGGAAGTCAAGGCTGGGACAGCCAATCTGATACTGTTTTGTTATCTTCCCAAGAGAAAA ACAGTGGGGATATTACTTCCTTGGACAAAGCTGACTACAGACCAACAATCAAAGAGAATATTCCTGCCTCTCA TGGAACAAAATGTAATTTGCCCAAAGGATACTTACTCTGATTTGAAAAGCAGAGATAAAGATGTGACAATAGTTC CTAGTACTGGAGAACCAACTACTCTAAGCAGTGAGACACATATACCCGAGGAAAAAAGTTTGCTAAATCTTAGCA CAAATGCAGATTCCCAGAGCTCTTCTGATTTTGAAGTTCCCTCAACTCCAGAAGCTGAGTTACCTAAACGAGAGC ATTTACAATATTTATATGAGAAGCTGGCAACTGGTGAGAGTATAGCAGTCAAAAAAAGAAAATGCTCACTCTTAG ATACCTAAGAATTCAAAGCGTTTCAACCTAGAGCAACCACTAAAAAACCTGCACAGAGATGACAGTCAATATTAC ACTTTGAGGTGGGCAATGGCTTGAGCCCAGGAGTTCGACACCAGCCTGGCCAACACACTGAAATGTGTCTCTACT TACAAAAAAAAAAAAAAAAAAAAAAAGCCAGGCATGGTGGTGGCCTACTCTGGAGGCCCTTGAGGACCACTTGAGCC ${\tt CAGGAGATTGAGGCTGCAGTGAGCCATGACTGTGCCACTCTAGTCTGGGTGACAGAGCAAGACCCTGTT}$ TAAAAAAGAAAAAGGCCAGGCACGGTGGCTCATGCCTGTAATCCCAGCTACGCAGGAGGCCAAGGCAGGAAATC AACTCTGTCTC

2585/2825 FIGURE **2297**

MKHQERFLFQGNNGTVLYTGDFRLAQGEAARMELLHSGGRVKDIQSVYLDTTFCDRRFYQIPSREECLSGVLELV RSWITRSPYHVVWLNCKAAYGYEYLFTNLSEELGVQVHVNKLDMFRNMPEILHHLTTDRNTQIHACRHPKAEEYF QWSKLPCGITSRNRIPLHIISIKPSTMWFGERSRKTNVIVRTGESSYRACFSFHSSYSEIKDFLSYLCPVNAYPN VIPVGTTMDKVVEILKPLCRSSQSTEPKYKPLGKLKRARTVHRDSEEEDDYLFDDPLPIPLRHKVPYPETFHPEV FSMTAVSEKQPEKLRQTPGCCRAECMQSSRFTNFVDCEESNSESEEEVGIPASLQGDLGSVLHLQKADGDVPQWE VFFKRNDEITDESLENFPSSTVAGGSQSPKLFSDSDGESTHISSQNSSQSTHITEQGSQGWDSQSDTVLLSSQER NSGDITSLDKADYRPTIKENIPASLMEQNVICPKDTYSDLKSRDKDVTIVPSTGEPTTLSSETHIPEEKSLLNLS TNADSQSSSDFEVPSTPEAELPKREHLQYLYEKLATGESIAVKKRKCSLLDT

2586/2825 FIGURE 2298

AAAATTTGAAGACAAG ATG GGCACCTACTCTACAATTCTGATAAAAACAGAGGTCATCGAATGTGGGAACTACTGTGGAGTACGCATCATTCACTCTTTGATTGCAGAGTTCTCACTGGAAGAATTGAAGAAAAGCTATCACCTGAATAA AAGTCAAATTATGTTGGATATGCTAACTGAGAATTTGTTCTTCGATACTGGTATGGGAAAAAGTAAATTTTTGCA AGATATGCACACACTCCTACTCACAAGACACCGCGATGAACATGAAGGTGAAACAGGAAATTGGTTTTCCCCATT TATTGAAGCATTACATAAAGATGAAGGAAATGAAGCAGTTGAAGCTGTATTGCTTGAAAGTATCCATCGGTTCAA CCCAAATGCATTCATTTGCCAAGCGTTGGCAAGACATTTCTACATTAAAAAGAAGGACTTTGGCAATGCTCTAAA CTGGGCAAAACAAGCAAAAATCATAGAACCTGACAATTCTTATATCTCAGATACACTGGGTCAAGTCTACAAAAG TAAAATAAGATGGTGGATAGAGGAAAACGGAGGAAACGGGAACATTTCAGTTGATGATCTAATTGCTCTTTTGGA TTTAGCAGAACATGCCTCAAGTGCATTCAAAGAATCTCAACAGCAAAGTGAAGATAGAGAGTATGAAGTGAAGGA AAGATTGTATCCGAAGTCAAAAAGGCGGTATGATACTTACAATATAGCTGGTTATCAAGGAGAGATAGAAGTTGG GCTTTACACAATCCAAATTCTCCAGCTCATTCCTTTTTTTGATAATAAAAATGAGCTATCTAAAAAGATATATGGT CAATTTTGTATCAGGAAGTAGTGATATTCCAGGGGATCCAAACAATGAATATAAATTAGCCCTCAAAAACTATAT TCCTTATTTAACTAAATTGAAATTTTCTTTGAAAAAGTCCTTTGATTTTTTTGATGAATACTTTGTCCTGCTAAA ACCCAGGAACAATATTAAGCAAAATGAAGAGGCCAAAACTCGGAGAAAGGTGGCTGGATATTTTAAGAAATATGT AGATATTTTTGTCTCTTAGAAGAATCACAAAACAACACGTCTTGGATCAAAGTTCAGTGAGCCACTTCAAGT AGAGAGATGCAGGAGAAACCTAGTAGCTTTAAAAGCAGACAAGTTTTCTGGGCTCTTGGAATATCTTATCAAAAG TCAAGAGGATGCTATAAGCACTATGAAATGTATAGTGAACGAATATACTTTTCTCTTAGAACAATGCACTGTCAA AGAACCGTATTTTCTAGCTTCCCTCTTATTCTGGCCAGAAAATCAACAACTAGATCAACATTCTGAACAAATGAA AGAGTATGCTCAAGCACTAAAAAATTCTTTCAAGGGGCAATATAAACATATGCATCGTACAAAGCAACCAATTGC ATATTTCTTTCTTGGAAAAGGTAAAAGACTGGAAAGACTTGTTCACAAAGGAAAAATTGACCAGTGCTTTAAGAA GACACCAGATATTAATTCCTTGTGGCAGAGTGGAGATGTGTGGAAGGAGGAAAAAAGTCCAAGAACTTTTGCTTCG TTTACAAGGTCGAGCTGAAAACAATTGTTTATATATAGAATATGGAATCAATGAAAAAATCACAATACCCATCAC TCCCGCTTTTTTAGGTCAACTTAGAAGTGGCAGAAGCATAGAGAAGGTGTCTTTTTACCTGGGATTTCCCATTGG ${\tt AGGCCCACTTGCTTATGACATTGAAATTGTT} \underline{{\tt TAA}} {\tt GAGCCTGATATTCTTCCTCCAAGAATTTGATCTCAGTACCC}$ ATTTAATTTTTTTGGACTCAAGATCTATGCTTTAAACCGGCAAGGTTATAGATACAGCCTCTAGCTCTTCAGATC ATTGTCTACTCAAATGGCATTTAGACATTAGAATGTCTGGGAAAATATTTCTCAAAGACAGCAAAAAACCTCTCAA ACTGAGGAGCAACATTTATTCTTACTAAGCAGATCATCAATGTATCATGTGCTTGGCACTCAAGGATCTTCCAAA ACAGAGGACCAACCAGTCTTCTGAAGGTCATGCCCACAGAAGTCATCGGACCTTACCAAAGTAGGTTGGAGAATT AGATTGCCTTTTCATGCAGTGAGATTCAGTTAAGCAAAAATGAAATTTGTCTCTATAGCTAATTAGCTTATCAAC TCCCCTCCAAACAACAATTAAAAAAAAAAACATACAGACACTCAAATTCCACAAGCTAATGAACAAAAGGGACTC TTGTGAGAGACTAATGAGTCCCTCATCCAGAAGATGCCAATGTACTGGCAGATTAACATACAACCTATGTTTTG AACAAAAACAACCAGCGATACGTAATCAAAATGTAATTTTCCCCTAATAAAATTATGGATATGGGCAGTCATCAA TGGCTGCCAAAACCATTAAGTGGAAAGCTGATTAAAAAAACAAAAATTTCTAATGGATTTATCAAACTGTCCCAAA TCCTGATAAATATTAACATCACAGAGGAAGACCAGACATTATGGGCCTGGAAGTACTATAGGAGTGCACACATCA CCCGTGACATGGTCTTGCCAAATAATTAAACCTGAATTTGATCAGGTCTCTGGATCTTATTTGCAATTCAAAAGA AATTTTAAAAAAATCCTACTAACACCACCACAAATATGCAATCAGCAATATCCAGAAAGGGGAAATTCACAGGAC AATCTATACATTATAAGGGACTTAACAACTAAAGGGCAACATATAGACTTTAGATCCTAATTTGAGCAAAATCTA AAATCAATTATTAGGCAATCAGAAAAATTTGAACACAGACTAGATATTTGAGGATATTAAGGTACTATATTATTG CATGATCTAGAAAAAAAAAAAAAAAAAA

2587/2825 FIGURE 2299

MGTYSTILIKTEVIECGNYCGVRIIHSLIAEFSLEELKKSYHLNKSQIMLDMLTENLFFDTGMGKSKFLQDMHTL
LLTRHRDEHEGETGNWFSPFIEALHKDEGNEAVEAVLLESIHRFNPNAFICQALARHFYIKKKDFGNALNWAKQA
KIIEPDNSYISDTLGQVYKSKIRWWIEENGGNGNISVDDLIALLDLAEHASSAFKESQQQSEDREYEVKERLYPK
SKRRYDTYNIAGYQGEIEVGLYTIQILQLIPFFDNKNELSKRYMVNFVSGSSDIPGDPNNEYKLALKNYIPYLTK
LKFSLKKSFDFFDEYFVLLKPRNNIKQNEEAKTRRKVAGYFKKYVDIFCLLEESQNNTGLGSKFSEPLQVERCRR
NLVALKADKFSGLLEYLIKSQEDAISTMKCIVNEYTFLLEQCTVKIQSKEKLNFILANIILSCIQPTSRLVKPVE
KLKDQLREVLQPIGLTYQFSEPYFLASLLFWPENQQLDQHSEQMKEYAQALKNSFKGQYKHMHRTKQPIAYFFLG
KGKRLERLVHKGKIDQCFKKTPDINSLWQSGDVWKEEKVQELLLRLQGRAENNCLYIEYGINEKITIPITPAFLG
QLRSGRSIEKVSFYLGFPIGGPLAYDIEIV

2588/2825 FIGURE 2300

2589/2825 FIGURE 2301

 $\label{thm:condition} \begin{tabular} MEPLRILILLFVTELSGAHNTTVFQGVAGQSLQVSCPYDSMKHWGRRKAWCRQLGEKGPCQRVVSTHNLWLLSFL RRWNGSTAITDDTLGGTLTITLRNLQPHDAGLYQCQSLHGSEADTLRKVLVEVLADPLDHRDAGDLWFPGESESF EDAHVEHSISRSLLEGEIPFPPTSILLLLACIFLIKILAASALWAAAWHGQKPGTHPPSELDCGHDPGYQLQTLP GLRDT \\ \end{tabular}$

2590/2825 FIGURE 2302

GCAGAGAGATTCAGAGGATTTATTGAAGAATTTTAATTCAGAGTGTGATACACACTGTGGCCTTGATACTGCACG ACAAGAATATTTGGGTAACTCATTAAGACAGGAATCAGACTTGAAAAAATCCACCTCGTCAGATAATTCAAGCTC TCATCATGGTGAAAATAAACAAAATCTGACTGTTGATCCCTGTGACATTTTGGGTGGAGTTGATAATCAGCAAAG ACTGCTACACATTGTCTGGCCTCACAGGTGGGAGCATGATAAAGATCCAGAAAGCTTTTTTAAGGTATTAATGCA AGAGGCCAAAAAGGCATTGGGATCTTCTGTCTTACACTGGGGCTACTTACCCAGCAAAGATGACTACTTCCAAGT ACTGTGCATGGCTGATGTTGTCATCTCAACAGCTAAGCATGAATTCTTTGGAGTGGCAATGTTGGAAGCTGTGTA ACCTGAACAGCTTTCAAAAAGGCTCCAGAATTTCTGCAAGAGACCAGATATTATAAGAAAACATCTCTATAAGGG TGAAATCGCTCCGTTTTCTTGGGCAGCCCTACATGGTAAATTCAGGTCTCTGCTTACAACAGAGCCTAGGGAAGA ATTTACCTGATCAGAGAGAAAAATCTGCAGAGGAAGCTGAGCCTGGCTGCTTGTCATAGCTGACACAGAGC CATCTGCCACAAACCTGTGGCGGCTTCAGATCTCCAATCCCTGCCACCCCAACTCAAATTAAATACAGATTC TTGTATAACCGCACTCATGTATCCCATATGTGGTGCCACATTGAATTTCCGGTTGAATCCGTTTTATCCTTTGT ACTGGATGACATGGTGCCTGAATTCTTTCTTTTCGCCGACACGATGGCAGCCAAACTGCAGCTTCAAACGCTCAC ACTTGGCTGGGTTTCTACCTAGGTTGCCAGGTTATCATCGGAGCCTTCTTGTGTCCTCAAAGGGCCACGAGGCCT GCACTTTTCTTTTAGCAAATTAATGACTCTCAGGCACAGGGGGTTTTAAGTGAAGGTATTAATAAGAGGTCTGGC AGGTATTCCCATGATTCACAGAGTTACATTTGCATTTAATTTAATCTTAAAGTTGCAAGATAAACAGCTGTAATTC GGACAAACATGACAAACACAGTGAAGCCAACTATCCCATAAAATGAACACTGACATACTTGTTTTAATTTTTTTC CCAGCGTAAAAATAGAAAAATCAAAATACTCCTAACAAAACCAGTGATTTTGATAGAAATATTTCTCCAATATAC $\tt TTGCATCCACCTACAAATATAACCTTTTCAAGATAAATCGCTTATGATTTCAATAGTCAAACTGCTGTTTTGTT$

ų.

2591/2825 FIGURE 2303

 $\label{thm:mlglkgnggavlsmalpfqpeqrdsedllknfnsecdthcgldtarqeylgnslrqesdlkkstssdnssshhge \\ nkqnltvdpcdilggvdnqqrllhivwphrwehdkdpesffkvlmhlkdlglnfhvsvlgetftdvpdifseakk \\ algssvlhwgylpskddyfqvlcmadvvistakheffgvamleavycgcyplcpkdlvypeifpaeylystpeqlskrlqnfckrpdiirkhlykgeiapfswaalhgkfrsllttepredl$

2592/2825 FIGURE **2304**

GAAAACATTTTGCTGAAAATATAAGCAAACATCGGCCTTGTCCTCCTTGTGTTCATACACTGTGGAAGCTTTTCT CTGCCTCCTCGTGAGAGTGCGTGGCCGGGAGACCAGAAACGTGGTCCTTTCTCTTGCCTGTGAGCTGGTGCAGA GCTGTCAGGAGGTCTCGCCAGAGGTGGCAGACGCTATCTGCCAAGCCATCGTCTTATCCGCCCCAGGGCCCCACG $\tt CCGTGCTCCTGGTGACACACTGGGCCGGTTCACGGATGAGGATCAGCAGGTGGTCAGGCGCCTGCAGGAGGTCT$ ACAACAGGGCACAGGGGGAGGACGCCCAACTGCGAGAGCTCATGGAGAAAGTTGAAGCCATTATGTGGG AAAACGAAGGAGATTATTACAGCAACAAGGCTTACCAATATACCCAGCAAAACTTTCGGCTGAAAGAACTACAGG TCCAGAAGGAATCTGAGGAAGCCCACAGATGCCTGCGGGGAAGGCTGACCTT**TGA**GCCTGTGCTGGACTTGAGC CAAGGACACCATCAGCCTTTGCACCCCCTGTGTCCAGCCCTCTGTTTCTCTTTCCATCCCATGGAGTGCTTCCC AGTCTCCAGGTCATGACGTCTGGTGTAGGAAGAGGGGCATGGGGCTTGAGGACAGGGTCCAGCATGCCCAGATCA CCTATTGGACCTTCTATCTCATTGGCATTGCCTTTCATGAGTTACTTGTCTATACTCTGATAGAACCAAAGTTTC TTGAGGGCAGGCCTGTATCTTTTACTTCTGTGTAACTTCCACAGCTTTTGACTGCATTGGAGTCATGCAGTCACG TTTGGTGCGGCAACTCCATGCAAGCTGTTGACCAGATGACTTCTCATCTCTCCCCACACCATGATGGTTTAAGGT GCCTGTTGTGTCTGGTGGAGACAGTGCTGGGAGATGATCAGAAATCTCAGGGCACAGCCTCAGGTCTACCTGGAC ACTCATCCACTGTTGGAGATGCTCAACAGCTAGACACAGATGCTCACAGCCGACCTGTGGCCTCTTGCTCTGAAG CCATCCCCATCTTCCCTAGACACAGCAGACATCTGAGAAAGCTTCAGCATTTCTCTTGCTAACAGATTCAGAAA AGTGTCTCAAAGCAGAGCACAGAGTTATTTGGTGTTTTGCTGAAGACAGCCTTTGTGCCACAATCACTTATTAAAT AAGCGATCAATTTCCCATTGAACTGAACATGCAACATTTATCATACATTCAGCTCTCATTCACACTCCTTAAGAT TTGGTCAGAATTTTTATTTCTGTTCATGTCTTCTACTTTTCTACTCCTGTATGAATAAAATATTGATTTGATTAC AGTGGCTTTGACTATAATGTGGGAGCCAATTTTTGCCTCAGTCTTCATTTTTATATTTACCTTGTTATTCTCAGG AATTTTGTAAATTTTGATGCTATTATTTTAACTCTATTAGCTTAAGTAATGTCATAATAGAAAACACAAGCATTT TACCTCAAAAAAAAAAAAAAAAAAAAAAA

2593/2825 FIGURE 2305

MNKFPRRIPQKSCPRILCWSCQEVSPEVADAICQAIVLSAPGPHAVLLVTQLGRFTDEDQQVVRRLQEVFGVGVL GHTILVFTRKEDLAGSSLEDYVRETNNQALAWLDVTLARRHCGFNNRAQGEEQEAQLRELMEKVEAIMWENEGDY YSNKAYQYTQQNFRLKELQERQVSQGQGSEDVPGEESWLEGLSQIQKESEEAHRCLLGKADL

2594/2825 FIGURE 2306

AATAGGGGAAAATAAGCCAGATGGATAAAGGAAGTGCTGGTCACCCTGGAGGTGCACTGGTTTGGGGAAGGCTCC TGCTGCTGCCCCTACTGCCCCTGCTGCCGCCAGCATTTCTGCAGCCTAGTGGCTCCACAGGATCTGGTCCAA GCTACCTTTATGGGGTCACTCAACCAAAACACCTCTCAGCCTCCATGGGTGGCTCTGTGGAAATCCCCTTCTCCT TCTATTACCCCTGGGAGTTAGCCACAGCTCCCGACGTGAGAATATCCTGGAGACGGGGCCACTTCCACGGGCAGT CCTTCTACAGCACAAGGCCGCCTTCCATTCACAAGGATTATGTGAACCGGCTCTTTCTGAACTGGACAGAGGGTC AGAAGAGCGGCTTCCTCAGGATCTCCAACCTGCAGAAGCAGGACCAGTCTGTGTATTTCTGCCGAGTTGAGCTGG ACACACGGAGCTCAGGGAGCAGCAGTGGCAGTCCATCGAGGGGGACCAAACTCTCCATCACCCAGGCTGTCACGA CCACCACCAGAGGCCCAGCAGCATGACTACCACCTGGAGGCTCAGTAGCACCACCACCACCACCACCACGGCCTCAGGG TCACACAGGGCAAACGACGCTCAGACTCTTGGCACATAAGTCTGGAGACTGCTGTGGGGGTGGCAGTGGCTGTCA CTGTGCTCGGAATCATGATTTTGGGACTGATCTGCCTCCTCAGGTGGAGGAAAGGAAAGGTCAGCAGCGGACTA AAGCCACAACCCCAGCCAGGGAACCCTTCCAAAACACAGAGGAGCCATATGAGAATATCAGGAATGAAGGACAAA ATACAGATCCCAAGCTAAATCCCAAGGATGACGGCATCGTCTATGCTTCCCTTGCCCTCTCCAGCTCCACCTCAC CCAAAGCACCTCCCAGCCACCGTCCCCTCAAGAGCCCCCAGAACGAGACCCTGTACTCTTAAAAGGCC<u>TAA</u>C CAATGGACAGCCCTCTCAAAACTGAATGGTGAGGCCAGGTACAGTGGCGCACACCTGTAATCCCAGCTACTCTGA AGCCTGAGGCAAAATCAAGTGAGCCCAGGAGTTCAGGGCCAGCTTTGGATAATGGGAGCGAGGATGCCATCTCTA

2595/2825 FIGURE 2307

MGRPLLLPLLPLLLPPAFLQPSGSTGSGPSYLYGVTQPKHLSASMGGSVEIPFSFYYPWELATAPDVRISWRRGH FHGQSFYSTRPPSIHKDYVNRLFLNWTEGQKSGFLRISNLQKQDQSVYFCRVELDTRSSGRQQWQSIEGTKLSIT QAVTTTTQRPSSMTTTWRLSSTTTTTGLRVTQGKRRSDSWHISLETAVGVAVAVTVLGIMILGLICLLRWRRRKG QQRTKATTPAREPFQNTEEPYENIRNEGQNTDPKLNPKDDGIVYASLALSSSTSPKAPPSHRPLKSPQNETLYSV LKA

2596/2825 FIGURE 2308

2597/2825 FIGURE 2309

 ${\tt MRTPGPLPVLLLLAGAPAARPTPPTCYSRMRALSQEITRDFNLLQVSEPSEPCVRYLPRLYLDIHNYCVLDKLRDFVASPPCWKVAQVDSLKDKARKLYTIMNSFCRRDLVFLLDDCNALEYPIPVTTVLPDRQR}$

2598/2825 FIGURE 2310

TTTTCAGTGCCTCTTCTGTCACAATCGTAGACACGGTCACACTCCAGTATCTGGGAAAACACAGAGATCGCTATG ACATCGAAGTGCTCATCGATGGAAAGGGGTGTAAGCCCCCCGAGTACAGGAATTACCAGATCGTCTTCATCGTCT TCGGCGTTCTCATGACCATGGCCTTGATCGTTGCCACTCAGTTCCGGTTCCGCTACAACCATTTCAAAAACGATG ATTCTAAAGGGAAAGAGTGGAGATCCCGCAGGTGGAAAGGAACAACTCTACAGAGTCCTCTGAGGAGACACCAA CCACCACAGCCACTCGCAGGCCTTCAACTTTTGGGACTTAATCAAGCTGCTCTGCAGCGTGCAGTATGGCTCAG TGCTGTTTGTGGCTTGGTTCATGGGTTTTGGATATGGCTTCGTGTTCACCTTTCTCTACTGGCATTTTGGAAGACC TCAATGGAACTACAACCCTCTTTGGGGTCTGTTCAGTCCTGAGTCATGTGTCTGAGCTGACAGCATATTTTTTTA GTCACAAGCTTATTGAATTGATCGGCCACATCAGGGTTCTGTACATTGGCCTGGCCTGCAATACGGCTCGCTATA TTTATATTTCCTACCTGGAGAATGCCTGGACTGTTCTCCCCATGGAAGTTCTTCAAGGAGTGACACACGCGGCCA TCTGGGCAGCATGCATTCTTACCTCAGTGCAGCCGTTCCCCCTGAGCTGAGGACATCTGCTCAGGGCATCCTGC AGGGCCTTCACCTGGGTTTGGGAAGAGGATGTGGTGCCATGATCGGAGGCGTGTTAGTCAATTATTTTGGGGCTG TGCCAGATGAGGAAGAAGACAATGTTGGCAGAAAGAATTCCTGTTCCCTCCAGTCCCGTTCCTATAGCAA CCATCGACTTGGTACAGCAACAGACAGAAGATGTCATGCCACGCATTGAGCCCAGACTTCCACCCAAGAAAACTA AGCACCAGGAAGAACAGGAAGATGTGAACAAACCAGCCTGGGGAGTCAGCTCTTCTCCCTGGGTGACCTTTGTCT ATGCACTCTACCAAATTAAAGAGATGATGCAACTCACAAGAGACAACCGTGCTTCTGAGATACAGCCTTTACAGG CTAGAAACCAGCCATCCCCTGACGCAGCAGCATCTCAGACGCAGACCAGCCCCGCTCACCCCAGTGTGGACCCGT GCACAGAGGAGTGAAGAGCAGCAGGCTCAGCTGGCCGCGGGAGGACAC<u>TGA</u>GGGCATCCTGCTCATCTCACAC TGGCAGAAAAAGGTAAACTTTCGTAATCTCATTGGAATTACAACAGGGAAATGGAGTTCAATGAGGACTTTCAGT TCTTTGCTTGGTTAGGTTAAGGATGATAGAATTTCTCTGCCAGTGCAGTAAGAGTTGAAACCGGCAGTTACACTA ATTACAAGATATATTTAAAAAGTAACCAGATAAAAGTAGCACATGTGCTTTTGTTAAAAATAAAGTTAAAAGTTA AAGTTAAAAATGAAGTTAAAAGTTTCATCAGAAACTTTACATATCTTTAGCAAATATATTTTTATATGTGTATG GCATATAATGGAAATAATTCTTTGAGCAACAGAAGCTATTATTAACTACTGCAAGCTAAGCCGAGCTTAAAAATG

2599/2825 FIGURE 2311

MWGSLGWGLAMLSVGIGIDYTHIEVLIDGKGCKPPEYRNYQIVFIVFGVLMTMALIVATQFRFRYNHFKNDDSKG KEVEIPQVERNNSTESSEETPTTTSHSQAFNFWDLIKLLCSVQYGSVLFVAWFMGFGYGFVFTFLYWHLEDLNGT TTLFGVCSVLSHVSELTAYFFSHKLIELIGHIRVLYIGLACNTARYIYISYLENAWTVLPMEVLQGVTHAAIWAA CISYLSAAVPPELRTSAQGILQGLHLGLGRGCGAMIGGVLVNYFGAAATFRGIGMACLVILLLFALIQWLAVPDE EEDKTMLAERIPVPSSPVPIATIDLVQQQTEDVMPRIEPRLPPKKTKHQEEQEDVNKPAWGVSSSPWVTFVYALY QIKEMMQLTRDNRASEIQPLQGTNGNRENSPAGRAQPVPCETHSDPSRNQPSPDAAASQTQTSPAHPSVDPCTEE SEEQQAQLAAGGH

2600/2825 FIGURE 2312

GTTTCATTGGATATTCACCCGAACTGCTACAGAACAACACGCTGCCCGATTACAGCCCGGGGGAATCTTTTTTCA CTGTCTTTGGGGTTTTCTTCCCAGCGGCTACAGGAGTCATGGCCGGTTCAACATGGGGGGGCGACCTCAGGGAGCC TGCCGCCAGCATTCCCCTGGGCTCCCTGGCAGCTGTTGGCATCTCGTGTTTCTGTACATCGTCTTCGTCTTCCT CCTGGGCGCCATCTGCACTCGAGAGGCCCTTCGCTATGACTTCCTGATAGCGGAAAAGGTATCCCTCATGGGCTT CCTGTTCCTTTTGGGCTTATACATCTCGTCCCTGGCTTCCTGCATGGGAGGACTTTATGGAGCTCCCCGCATCCT CGTGGCTGCCATCTGCCTGACCAGCTTGGTGACCATGGCCTTTGTTTTTTGTGGGTCAAGTGAACGTTCTGGCCCC ${\tt CATCGTCACCATCAACTTCATGCTTGACATACGTTGCAGTGGACTACTCTTACTTCTCCCTGTCC{\color{red} ATG} TGTTCCT \\$ TAGAGAAAGCTCCCAGTTACGGCTCTGAGGGACCTGCCCAAAGAGTCTTGGAGGGCACGCTACTGGAATTCACCA CCCCAGAAAGTCAGAAGAGGGAAAAGCAAGAAGGCCACCAAGCAGACCCTACAAGATAGCTTCCTCTTGGACCTCA AATCCCCTCCTTCTTCCCTGTCGAGATCTCTGACAGGTTGCCCGCTGCCTCCTGGGAGGGGCAGGAGTCCTGCT GGAACAAGCAGACTTCCAAGAGCGAAGGGACTCAGCCTGAGGGAACATATGGAGAGCAACTTGTTCCTGAGCTGT GCAACCAATCAGAGTCCAGTGGAGAAGATTTCTTCCTGAAGTCCAGGCTCCAAGAACAAGATGTCTGGAGAAGAT CCACTTCTTTCTATACCCACATGTGCAACCCCTGGGTCTCCCTGTTGGGGGCTGTTGGGTCCCTTCTCATCATGT TTGTGATACAGTGGGTGTATACCCTGGTTAACATGGGTGTTGCTGCCATCGTGTATTTCTACATTGGCCGGGCCA $\tt GTCCAGGGCTTCACCTTGGATCAGCCTCCAACTTCAGCTTTTTCCGGTGGATGAGGTCTCTTTGCTCCCCTCCT$ GCAGGAGCTTGCAGTCCCCCCAGGAGCAGATCATCTTGGCGCCGTCCCTGGCTAAGGTTGACATGGAGATGACTC AGCTCACCCAGGAGAATGCAGACTTCGCCACTCGGGATCGCTACCACCACTCCTCCTCGTGAACCGGGAGCAGC TGATGCCTCACTACTAGATGCAGTGCTGGGACCTTCCTCTTTTGGAGCTGTCCCATGTACAGTGGACCCAAGCCC AGGACCTTCGTGGAGCTGCTTCTCCAACCTGAGAAACTCAAGACCCATCCTCCCGCTGTCACTTTGGACAATGGA AATCTACATTTTCTTTTCCCTTTTTTTTTTTTGAGACAGAGTCTCGCCTTGTCACCCAGGCTGGAGTCCAGTGG CACAATCTTGGCTCACTGCAACCTCTGCTTCCCGAGTTCAAGCAATTCTCCTGCCTCAGCTCTGAGTAGCTGGGA TTATAGGCATGCACCACCACCACCAGCTATTTTTTGTATTTTTACTGGAGACAGGGTTTCACCATGTTGGCCAG GCTGGTCTCGAACTCCTGACCTCGTGATCCACCCGTCTCAGCCTCCCAAAGTACTGGGATTACAGGCGTGAGCCA CCATGCCTGGCCAGAAATCTATGTTTTCTTAGAACATGTGGAAGAAGGAAAAAAGACAAAAAGGAAGTCTGGATTC TGAGGACCACGTCTCACCCAGGGTGACATCAGGAATGGTGCTAGCCTCTGCAACACGACACCCAGTTTGAAGAGC TCTATACAGGTACTAAGACTAGCAGGGGACACCAAGACTCTGCACAACCAGATTGCTTGTGCAGAGGGCCACAAT AAAAAAAAAAAAAAAAAA

2601/2825 FIGURE 2313

MCSCSLTPVPEPVLREGAEGLHCSEHLLLEKAPSYGSEGPAQRVLEGTLLEFTKDMDQLLQLTRKLESSQPRQGD GNRTPESQKRKSKKATKQTLQDSFLLDLKSPPSFPVEISDRLPAASWEGQESCWNKQTSKSEGTQPEGTYGEQLV PELCNQSESSGEDFFLKSRLQEQDVWRRSTSFYTHMCNPWVSLLGAVGSLLIMFVIQWVYTLVNMGVAAIVYFYI GRASPGLHLGSASNFSFFRWMRSLLLPSCRSLQSPQEQIILAPSLAKVDMEMTQLTQENADFATRDRYHHSSLVN REQLMPHY

2602/2825 FIGURE 2314

2603/2825 FIGURE 2315

 ${\tt MAAAAYVDHFAAECLVSMSSRAVVHGPREGPESRPEGASVAATPTLPRVEERRDGKDSASLFVVARILADLNQQAPAPAPAERREGAAARKARTPCRLPPPAPMSPPPPALKARRAAPPSPAWSEPEPEAGLEPEREPGPAGSGEPGLRQRVRRGRSRADLESPQRKHKCHYAGCEKVYGKSSHLKAHLRTHTGERPFACSWQDCNKKFARSDELARHYRTHTGEKFSCPICEKRFMRSDHLTKHARRHANFHPGMLQRRGGGSRTGSLSDYSRSDASSPTISPASSP$

2604/2825 FIGURE 2316

GAATTCCGGCTCCGCGGCTGCAGGCGCCCTAGAGTGCCTGGCGGGCTCCGGCTTCCGCGTCCGCCCCGGCC GGCGAGGTGGACCGGCTGGTGGCCCAGATCGGCGAGACGCTGCAGCTGGACGCGGCGCAXGACAGCCCGGCCTCG TCCCCGGCGGTGCCGCTGCTGCCGCCCCGCGTTGGCGGAGACTGTGGGCCCCGGCGCCCCCTGGGGTCCTGCGC TGCGCCCTGGGGGACCGCGCGCGCGCGCGCGCGCCCTACTGCGTGGCCGAGCTCGCCACAGGCCCC AGCGCGCTGTCCCCACTGCCCCTCAGGCCGACCTTGATGGGCCTCCGGGAGCTGGCAAGCAGGGCATCCCGCAG CCGCTGTCGGGTCCGGCGAGGATGGCTCCGGGGCGCCGCCTCCCGCCGCCTGCAGCAGCGACGCGGG TCCCAACCAGAAACCCGCACAGGCGACGACCGCCTCTGCAGCAGCTAGTGCTCTCTGGAAACCTC ATCAAGGAGGCCGTGCGAAGGCTTCATTCGCGACGGCTGCAGTTACGTGCAAAGCTTCCCCAACGCCCGCTCCTG GGACCTCTGTCGGCCCCGGTGCATGAACCCCCTTCGCCTCGCAGCCCTCGCGCGCCTGCAGTGACCCTGGCGCC GCCAGCCTCAGACTGGAGGGCAAGGGGTTCCCTTGAGGGCTGCAGTTCTACTCAGGCTGGTGGAGAACTCTGGCT TTTGGAAGCGAGAGTAAAAAGCTAATGACGAGGAACCGAAAAATCGCGAGTGTTTCGCGGGTAACTGGGGTTGAG GGCCAAAATATTTGGAATGAAGGACTTGGCCCTATTTAAGGCAGATTTTACAGAGCGCACCTCAAACGTACAAGT CAGTAGGACTCCTTATTTGGCGTGACCCGACCTGGCCGCGGAGCCTGCATTTCCTCGCAGCCTCTCAGTGCCCTC CAGCCCCGCGACCATGTGGCCACAATCCACGCTTCTCCGGATCGCGGTGCGCCGGAACCACGGAGGATGATGCCA GTTACTTGCTTTACCTTTTCAGGGCTGGCTCCTGATCCACTTTGGGGGAGGAGAACATGAGTAGATAATTTCAGG GTGCAGCCCAATCTGCCAGACTTAAAAAAAACCATCTTGTGTCTTTTGGAGGTGCTGCTTAATATCAAACATGCGGT TAGAGAGGCGCGGAGTGAACCCCACGCCTGTCTAAAGTGTATTTTCAGAGCCGGCCCGCCTCTCCTCGGTTCAA GGTCACTGTTTCCTGGGCACGCACTGGGTTGCGGGACAGAGTAGCCAGTTTCTGCCGGTGCTCGGAGAAGAGCGC AGTGTTTTGCAAGTGCTGGAGTCTCCTGAGGACACGCGCGTCGCCGCCGCCGCGGGTGTGGGAAAGCGCGGACGT GCTGGGCGTCTGTGCTTCGGTAGGCGACCACCGCCCCTGGCCGCGCTCCGGGGCTTTCACGGAAACTCCCGAGACC GGGCCCTGGGTTCCTCCTCCTACTCGGCTCTGCAGTCCTACTCAAGCGGGTGGCTCTGGGATCCTGGGGGCCT GGGTTGGGGGCTAGGGAGCCCATGTGATGGACACTCCAGGGACACACAGCCTAGCACAGCAGCTTATAATGGG CAGCCATGCCAGCTGGCCTTTGTAAGTGCAGGAAACCGAGTAGAAAATGTGACCCTCCAAATGGAGAAGCTGCCA GTTGTTCTCGTTTTTATAGTCAATGGCTTGTTCATCATCATCAGATGTGGCTACTGACATATCTACACTTCGCACCG GAGTGTCTGGAATTGTGGCTATCCTGATTATAGGATTTTAACTTAACTGAAATGCCTGCTTTGAATAAATGTGTT GGGTTTTT

2605/2825 FIGURE 2317

 $\label{top:control} \begin{tabular} MPCRREEEEEAGEEAEGEEEEDSFLLLQQSVALGSSGEVDRLVAQIGETLQLDAAXDSPASPCGPPGAPLRAPG PLAAAVPADKARSPAVPLLLPPALAETVGPAPPGVLRCALGDRGRVRGRAAPYCVAELATGPSALSPLPPQADLD GPPGAGKQGIPQPLSGPCRRGWLRGAAASRRLQQRRGSQPETRTGDDDPHRLLQQLVLSGNLIKEAVRRLHSRRLQLRAKLPQRPLLGPLSAPVHEPPSPRSPRAACSDPGASGRAQLRTGDGVLVPGS \end{tabular}$

2606/2825 FIGURE 2318

AGCATATTCTCAGGAGACGGGGCCCCTGCCTGCCACCAAGCATTAGGCCACCAGGAAGACCCCCATCTGCAAG TTATTGTGGTAGTGCTTAAAGTTGTTGGAATGACCTTATTTCTACTTTATTTCCCACAGATTTTTAACAAAAGTA ACGATGGTTTCACCACCACCACGAGGTTTGGAACAGTCTCACAGATTTTTGGGAGCAGTTCCCCAAGTCCCAACG TATCCACTTCTGAATCATCTTGGAATGAAAGCAGGGACTTTTGCAAAGGAAAAGGATCCACATTGGCAATTGTCA ACACGCCAGAGAAACTGAAGTTTCTTCAGGACATAACTGATGCTGAGAAGTATTTTATTGGCTTAATTTACCATC GTGAAGAGAAAAGGTGGCGTTGGATCAACAACTCTGTGTTCAATGGCAATGTTACCAATCAGAATCAGAATTTCA ACTGTGCGACCATTGGCCTAACAAAGACATTTGATGCTGCATCATGTGACATCAGCTACCGCAGGATCTGTGAGA AGAATGCCAAA**TGA**TCACAGTTCCCTGTGACAAGAACTATACTTGCAACTCTTTTTGAATCCATACAGGTCGTCT GGCCAATGATTCTTTTACTTACCTATCTGTCTACCAGTAGCGGTCCTTGCCCATTTGGGAAACTGAGCTTCTTTC TTCTGCACTGGGGGACTGGATGCTAGCCATCTCCAGGAGACAGGATCAGTTTTACGGAAACAACTCAGTTAGTAT TTTATTTTAGCCTCAGAGTATACCATACTACTAGGGAGTAACTGTAGAGTGAGAAATTATAAACATTATTTAGGG ATTACCATGGTGGAAGAGGGATAAACATAGGTCCTGTGACTTCGTCTCTGTTCTCAAGGGAACCCCATTCACATG CCCCTCCTAACTCCACAAGCGAGGGTAGCAGAGGCTCTCCTCAGTCTGAACTAAGGCTTGGCCTTGGGGAGGGCT CCTAGTGCTGAGCTTGGAGCACCACGGACAGCACTTGTTTATGGGAATGGAGAGGTCTGGGCAGGATAGGA ACCTTCTTGGAGACCCCTTTGAAGAAAACCAGGCAGCCAAGGGAGCCAAACACACTAGATTTCTGTTCTTCAGCA AAGCCCTGAAGAGACACTTAAGCTAAAAATTCCCTTGTCATATTTCTGAAACTCCATTATAACATATGTAACTCC TTTGTAACCAAAATTTAGGTAAGCAGGCTTCCTTTGCTCTGAAGGTTTTTGAGTACCTGGCTGTATTTGTTGAGTA TTTTTAAAATTTTGGATAGTCTCTTAGGCAACAATAATCACAATATATTCATCCCTTCAGTTCTGGAGAAAGCCT GATACCAGCACAGCCTACTGACCCCAAGGAGCCTGGCACTGATTGGCATCACATTGATCTAAGAACTGGTCCAGC CGACGAAGAGTAGGAAAAGAGAAGGGCTGCTCAGGGAAACATTGGCTGGGGGCACGGAATAAGCACATAGTAAAA AGGGAACATCAGGGTCAAATGGAAATCACCTGAGACAGGAAACAGGGAGTTCATTTGGCCACACTGGAAGAAAGG CAAGAAAGAGAAGACAAGTCTTGGGGTACCCTGGCTGTTCTCCACACTCACAAGACATCAGCTATATACTCTGC TTGGTGCATAAGAGAGAGAAAAGAGATGCCTTTTGTGTTTTTGAGTAAGAATAATTAAACCATAAGGAAGACCATG TATAAAACTGATGGAAATAATAGTCACCAAAGTACAGCACATACCATTTTGTGTCTAATAACAATGTAGCACAGT AATGACTGTACATGTCATTGTATGTATACCAAACAAGATTGTTGTAAATCATATTTTTTATTACAACACTAAGTT $\verb|CTGCTTCTGCATTCCTAGGTTTCATCATTTTTGGCTCCTTAGCATGGCCACTTACAATTTTTTAACATGAGATAA||$ CACATCAGGTGTCAGAACTTGCTTGAAGGGAATTACCAGAAGTAATTTGTGTTTTGAGATGGGGTGGAAATTGGAA TTATATTAGTAGCCGGTGGAGATACAAGTTCTCTGACTGTGTTGGGAAAGGATAAGTGCTACCGTTGAGAAGGGA AGAAAGGCTGAGTCTAGGTGGAGAAAAATATCAACAGAACTCTAGCCAAAGGCAAGCCCCAGAACTCAGACAACA ACTGCAAACTTTTAAGATCAGGAAATGTAGACATCTAGTGATTTCTTTAGTAGACAGTTTAATTTCCCCCAAGAT TAGGAGACACTTCTGTGCAGGTTCTAAAAGGAGCCCAATGGCCTGGGGTGGGAGTGGGGAGTAGATAGGGAATAT GTGGGATTTGGTTTAAGTTCATCATTGGGAGAGTTCCTGGATCCTTGCAAGCTTAGATAAATGTGATCTTTATTA GATAGCAGTGGCATGCTTTTAAAAAAAAAAAAGGCAATGAAAATTTAGCAAGCCACTGAATTTGAGTTTTCACTTT GTTTCTAATATGCTGTGTGAATCAGTACAGTTTTCTTACCCTTTCTTGGTCTTAATTTCCTTACTGATAAAATGG GGTAGTAATACCTATCTCAAAAAATATTGCACATATTAAATAACATTCCTCTATGTATCTCAATGGCATTAGACA TTAGGAGAAGCATTTTGTGGAGGATTTGAAGTTGAGATCTTCATCCAAGAAGTAGCTTTTCAATTTGCTAGAAGC TTAATGTAGGCAAGCCACTTCATTTTTCAGAACTTGTTTACTCATTTATAATATGGGAATAAAAATTTGTGCAAG TCAGAGAAGGGTGCCTTAAAAATGTTGTGGCCAAGCCACATGAGATCAAAGACACACTTTTCATGACCTCAAATG TGGGCCCAGCCTAGGTCAGCCAACCCCATCCAACCCTTAGACTCACGAACAATCCACCTGAGATCAGCAGAGC CACCCTAGATCAGCTGAAACTCTAAGCACAAAAATAAAAACTTATCACTGTATACCACTGGAGTTTTCTGGTTAT CTCTCGTATAGCAAAATCTAACTGATGCAATCTCCATCTGGCCTTCATCCTTCTCCCTTTATTGTCCTTTCGTGT ATTGTTCATCCAGCAACCAGGATGATCTTGTTAAAACATTAAACAGATTCTGTCACTCTT

2607/2825 FIGURE 2319

 $\label{thm:condition} MNWHMIISGLIVVVLKVVGMTLFLLYFPQIFNKSNDGFTTTRSYGTVSQIFGSSSPSPNGFITTRSYGTVCPKDW\\ EFYQARCFFLSTSESSWNESRDFCKGKGSTLAIVNTPEKLKFLQDITDAEKYFIGLIYHREEKRWRWINNSVFNG\\ NVTNQNQNFNCATIGLTKTFDAASCDISYRRICEKNAK$

1

2608/2825 FIGURE 2320

GGGGGGGGGGGGCCCCAGCGGGATGCGGTGAAGGGCGAGCGGCGGCGGCGCTGCGATGAGTGCCTCTGCGGCC ACCGGGGTCTTCGTGCTGTCCCTCTCGGCCATCCCGGTCACCTATGTCTTCAACCACCTGGCGGCCCAGCATGAT TCCTGGACTATTGTAGGGGTTGCTGCCCTCATCCTGTTCCTGGTAGCACTGCTGGCTCGTCTCGTCAAAAGA AAACCACCCGGGACCCACTGTTCTATGTGTATGCAGTTTTTTGGATTTACCAGCGTGGTGAACCTCATCATAGGA CTGGAGCAAGATGGAATCATTGACGGGTTCATGACACACTACTTGAGAGAGGGTGAACCGTATCTGAACACCGCA TATGGGCACATGATCTGCTACTGGGATGGCTCTGCTCATTATCTGATGTACCTGGTGATGGTGGCAGCCATAGCA TGGGAGGAAACTTATAGAACCATTGGCCTATATTGGGTTGGATCTATTATTATGAGTGTTGTTTTTTGTGCCA GGAAACATTGTAGGGAAGTATGGAACACGAATTTGCCCTGCTTTTTTCTTAAGCATACCATATACTTGTCTTCCT GTCTGGGCTGGTTTCAGAATCTATAATCAGCCATCAGAAAATTATAATTACCCCTCAAAGGTTATTCAAGAAGCC CTGTTCAGAGGTTTGATTGCTTTGGATTGCCCATCTGAGCTCTGCCGATTATATACGCAATTTCAAGAGCCCTAT CTAAAGGATCCTGCTGCTTATCCTAAAATTCAGATGCTGGCATATATGTTCTATTCTGTTCCTTACTTTGTGACT GCACTGTATGGCTTAGTGGTTCCTGGATGTTCCTGGATGCCTGACATCACATTGATACATGCTGGAGGTCTGGCT CAGGCTCAGTTTTCTCACATTGGTGCATCTCTTCATGCTAGAACTGCTTATGTCTACAGAGTCCCTGAAGAAGCA AAAATCCTTTTTTTAGCATTAAACATAGTATATGGAGTTCTTCCTCAGCTCTTGGCCTATCGTTGTATCTACAAA CCAGAGTTCTTCATAAAAACAAAGGCAGAAGAAAAAGTGGAA**TAA**AAATATTACTTCATGTTCCTCCTTTCTAAA TTCTTGAGAAACAGTTTGTTTAAAGAAATATATTCAAAATCATTTGTGAATAAACTTGATCATCCCATCTCAAAAA ΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑ

2609/2825 FIGURE 2321

MSASAATGVFVLSLSAIPVTYVFNHLAAQHDSWTIVGVAALILFLVALLARVLVKRKPPRDPLFYVYAVFGFTSV VNLIIGLEQDGIIDGFMTHYLREGEPYLNTAYGHMICYWDGSAHYLMYLVMVAAIAWEETYRTIGLYWVGSIIMS VVVFVPGNIVGKYGTRICPAFFLSIPYTCLPVWAGFRIYNQPSENYNYPSKVIQEAQAKDLLRRPFDLMLVVCLL LATGFCLFRGLIALDCPSELCRLYTQFQEPYLKDPAAYPKIQMLAYMFYSVPYFVTALYGLVVPGCSWMPDITLI HAGGLAQAQFSHIGASLHARTAYVYRVPEEAKILFLALNIVYGVLPQLLAYRCIYKPEFFIKTKAEEKVE

FIGURE 2322

CATTTGCTATGAATATTCTCTATAACAAAGCAAGACAAATTTAGCAGCACTTCATTGCATCTGGATGGGGGAGAG $\mathtt{AGCTGGACAATTTCTTGCTAACAAGAG}$ \mathtt{ATG} $\mathtt{GTTAACTGCCCTCACCTCAGCCGTGAATTCTGCACACCTCGCATC}$ CGGGGCAACACCTGCTTCTGCTGTGACCTCTACAACTGTGGCAACCGGGTGGAGATCACTGGTGGGTACTACGAA TACATCGATGTCAGCAGTTGCCAAGATATCATCCACCTCTACCACCTGCTCTGGTCTGCCACCATCCTCAACATT GTTGGCCTGTTCCTGGGCATCATCACTGCCGCTGTCCTTGGAGGCTTTAAGGACATGAACCCAACTCTCCCAGCA CTGAACTGTTCTGTTGAAAATACCCATCCAACAGTTTCTTACTATGCTCATCCCCAAGTGGCATCCTACAATACC TACTACCATAGCCCTCCTCACCTGCCACCATATTCTGCTTATGACTTTCAGCATTCCGGTGTCTTTCCATCCTCC CCTCCCTCTGGACTTTCTGATGAGCCCCAGTCTGCCTCTCCCTCACCCAGCTACATGTGGTCCTCAAGTGCACCG GGCTATTGAGATTATTGTGGCTTTTGTATTTCTGCTTCAGTGGAAGTGTGTAGGGTACAAAATTTAAAGTGTGAC TCTTATGCATAAAGTTTTACAATGGCCTGCCAGGCTAGGGAAAGATAGGGACGAAGCTTATTCATTATTAGTGCA AGCAAGAAGCTTGTTTGGACTTGCATTACCCTATGCTCCACCTCTGTATTCAGCAGAAGTGTGGTTGCCATCTTT TTCACTTTATGTAAAGGAGTGTTGCCCTCGGGCCCTTGGCAGATTGCCACCCCAGCACCTAGGTTGAAGCACCTG GTTTATAGGCCCTATCTTTCCCTACCCCTAAAGTCAGTCCCTAAGGACAATTTCCCAGCTGATGGGGCTACACAG TAGTTCCAATACAGAGAGTTCTGGCTAAGATTTTGTTTGCTTGTGTCTGGATGTTGAAAAAGACTGCCCGTATCT CTTACTCCTTCCTCTGTGAGTATTGTAAAAATGGCTGTTGTGATCACTCAGCTCAGCTTTTGTTATTGGTAC CTCCTAAAGGGAAAAGTGCAATATTCTTGCATCTTCAGTAGTGGGGAACAGGATGTATTGTTCCGGAAACACTGA AATACACAGCAACATGTGAGATGTTTTAAGTAGATCACTTAGGAGACAGTGGTTCTACTACATGTTGCATTATTA CAAAATACATTTGCTACAGGAGATATAAATCTTATGGTTGTAATTCAGAGTTTAAAAATGTTATAAATTAGGTTC TTGGGTCGTGATATGAATTGTTACTAATCTTTGTGACTATTTAATCTTCAAATATTGTGCTTAACCCCAGCAATC CGCACGTATCCTGCACCCCACCCCAAAAGAGTCATCTGTATTTTAATGCCACTGGTCTTATCGGTCCTTTTGTCT GTTGAGACCAGTCATGACAGCATTCAAGATTATGAAAGTGTTACAATGCCGCTTCAAGTCTGCAAAACCTCAAAC CAGTTCTTTTAATTACACATAGCTTTAAACCATCAACCTGATGAGTTTAAAGCTTTTGCACCCATGCCTTCACTT CAGAATGAACACCTTCATTGTGATCTTATGTTAACCTGAGAATTGATTTAAAGGAAGATTGATAATCCTATACTT AATTTTCCGGCCAATTTTGCTACCTCCCAACTTGATGGATTAGAGGTAGCGCATATGCTGGTGCTCCCATCTACC TTGTAGACACTTAGCCATCAAGAATCAAGGCACAAGAAGTGCACTCTCTCATTAACAGTAAATGTTTGCAAGATA TTCAGTTTAACTTTCAGCATCATGAATGTTCTTATCCAGATTTTGAATCCGAAAAACTATAATCCTTTTATGTTA TACAAAATTACTATGATTTTTTACAGTTCTGAGCATATTAAAATTCTACTGGATTTCAAAAAGAGACTAATACCC TAGTGAATGTCCATATTTAATTTTTTAAGGCACCATTACACAGTTTATCCTACATTTATCACATTTCTTAAAGTG TTAAGATTCTATGGCTCATTTCTATGTATTTTTCTTACTTTACAAAATAACCTGAAACAGTATAGATTTTGTAAC ACTTAATTTGAGCAGCTTTTTTATTACATTGAATTATATAAAGTGCATGTTACCTTAGAAAAATTAGTATTTGCT GCTTTACTCTTTTGCAAAACATTTGCTGTAATGAATGGATTTGTATTTCCAATATGTATCTTGACTGCATTTTGT AATATTTACTGCTTTATTCCTAATTCTGCTTTAAAGTACTGAACTGGGCATGAAACATTAAAATATTAATCCAGA AACTGTATAAACTGGATGTTGCTTAAAATCTGTATCACTGCCATGTTGAAAATTCAGACTGCTTTTGTGATGTTT CAAATGAATAAAACTATCCTCCCCTCGTT

2611/2825 FIGURE 2323

2612/2825 FIGURE 2324

AAGGCTATTATTACCACCACTGAGTGGCTTAAATAATCCTGTCAACAGCAATCGCCCATTTCCAAAGCCATGGTG GTCTTCTTTGGAGTAAACCTTCAACACCGGATTTTTTCTTTTAATTATGGATGTAAACCCCAATATCCCCATAAT TTACATTGGGTCTCGACCAATTGCCTAATTATAAGAGGATATATTTAGGCTCTTATTTCATCCACACAAAAACTT GTGTAACAGGTAGTTGGAAACATCTGAGGCACCACTTTGATTCTGTTTTTGGATGGTCATGTTTTTTCTCCTCCGT TTCCCCAGCATGTCTGCCACCATCCTCATGCACTGCTTCCAAGTGCCTGGGAGCCTTTATGAGCGTCCCTAAACC TAAAAGAATCCAGAGGCGGGGCTCGGATGAACCCTCGAGATAAGCAAGTGAGCCGCTTCTCCCCTCTAAAGGATG TTTACACGTGGGTGGCACTCGCTGGAATCCAGCGCTCGGGCAGCCCTGGGAGGACGCCCTCAGCTGCGAGGAGGA TGGAGAGCAATACATCATCTTTGGAGAATTTAGCGACGGCGCCTGTGAACCAGATCCAAGAAACAATTTCTG ATAATTGTGTGGTGATTTTCTCAAAAACATCCTGTTCTTACTGTACAATGGCAAAAAAGCTTTTCCATGACATGA ATGTTAACTATAAAGTGGTGGAACTGGACCTGCTTGAATATGGAAACCAGTTCCAAGATGCTCTTTACAAAATGA $\tt CTGGTGAAGGAACTGTTCCAAGGAATATTTGTCAATGGTACTTTTATTGGAGGTGCAACTGACACTCATAGGCTTC$ GTTTATACTAATAAGTTTGCTAGTACAGTGTCAGTTATTTAAAGTGGTAATGCCCGATAATGTCTTTTAAATGTT TGAGGATGTTTAAATACATGCATTGTCTTCACGAAGAAGATGTAAAAATAATGAACAATAAATTGCGGTGGAAA ССТАААААААААААААААААААА

2613/2825 FIGURE **2325**

 ${\tt MNPRDKQVSRFSPLKDVYTWVALAGIQRSGSPGRTRSAARRMESNTSSSLENLATAPVNQIQETISDNCVVIFSK\\ {\tt TSCSYCTMAKKLFHDMNVNYKVVELDLLEYGNQFQDALYKMTGERTVPRIFVNGTFIGGATDTHRLHKEGKLLPL\\ {\tt VHQCYLKKSKRKEFQ}$

2614/2825 FIGURE 2326

TTCTCACTATACTGGTCCTGAGGAAAGGGCTTCTGTGAACTGCGGTTTTTAGTTTTTATTGTGGTTCTTAGTTCT $\texttt{AAGCTCTCTCCCATT} \underline{\textbf{ATG}} \texttt{ACTTCGGAAATCACTTATGCTGAAGTGAGGTTCAAAAATGAATTCAAGTCCTCAGG}$ CATCAACACAGCCTCTTCTGCAGCTTCCAAGGAGAGGACTGCCCCTCACAAAAGTAATACCGGATTCCCCAAGCT GCTTTGTGCCTCACTGTTGATATTTTTCCTGCTATTGGCAATCTCATTCTTTATTGCTTTTTGTCATTTTCTTCA TATGCCCGTGGAAGAGACAGCCTGGAGCTGTTGCCCAAAGAATTGGAAGTCATTTAGTTCCAACTGCTACTTTAT TTCTACTGAATCAGCATCTTGGCAAGACAGTGAGAAGGACTGTGCTAGAATGGAGGCTCACCTGCTGGTGATAAA CACTCAAGAAGAGCAGGATTTCATCTTCCAGAATCTGCAAGAAGAATCTGCTTATTTTGTGGGGGCTCTCAGATCC AGAAGGTCAGCGACATTGGCAATGGGTTGATCAGACACCATACAATGAAAGTTCCACATTCTGGCATCCACGTGA GCCCAGTGATCCCAATGAGCGCTGCGTTGTGCTAAATTTTCGTAAATCACCCAAAAGATGGGGCTGGAATGATGT TAATTGTCTTGGTCCTCAAAGGTCAGTTTGTGAGATGATGAAGATCCACTTA ${f TGA}$ ACTGAACATTCTCCATGAAC AGGTGGTTGGATTGGTATCTGTCATTGTAGGGATAGATAATAAGCTCTTCTTATTCATGTGTAAGGGAGGTCCAT AGAATTTAGGTGGTCTGTCAACTATTCTACTTATGAGAGAATTGGTCTATACATTGACTGATTCACTTTTTCATA AAGTGAGCATTTATTGAGCATTTTTTCATGTGCCAGAGCCTGTACTGGAGGCCCCCATTGTGCACACAGGGAGAG AACATGAGTCTCTCTTAATTTTTATCTGGTTGCTAAAGAATTATTTACCATTAAATTATATGGTGTGGTGT

2615/2825 FIGURE 2327

MTSEITYAEVRFKNEFKSSGINTASSAASKERTAPHKSNTGFPKLLCASLLIFFLLLAISFFIAFVIFFQKYSQL LEKKTTKELVHTTLECVKKNMPVEETAWSCCPKNWKSFSSNCYFISTESASWQDSEKDCARMEAHLLVINTQEEQ DFIFQNLQEESAYFVGLSDPEGQRHWQWVDQTPYNESSTFWHPREPSDPNERCVVLNFRKSPKRWGWNDVNCLGP QRSVCEMMKIHL

2616/2825 FIGURE 2328

AGATCAGCTGATGCCGGAGGGTTTGAAGCCGCGCCGCGAGGGAGCGAGGTCGCAGTGACAGCGGCGGCGATCGG ACCCAGGCTGCCCGCCGTACCCGCCTGCGTCCCGCGCTCCCGCCCCAGCATCACAGCCCCGGCGGGTCCGCGCG GCTCAGAGACCGAGCGGCTTCTGACCCCCAACCCCGGGTATGGGACCCAGGCGGGGCCCTTCACCGGCCCCTCCGA AGGGCCGCAAGCCCTGCAAGCTGATGCTGCAAGTGGTCAAGATCCTGGTGGTCACGGTGCAGCTCATCCTGTTTG GGCTCAGTAATCAGCTGGCTGTGACATTCCGGGAAGAGAACACCATCGCCTTCCGACACCTCTTCCTGCTGGGCT ACTCGGACGGAGCGGATGACACCTTCGCAGCCTACACGCGGGAGCAGCTGTACCAGGCCATCTTCCATGCTGTGG ACCAGTACCTGGCGTTGCCTGACGTGTCACTGGGCCGGTATGCCGTATGTCCGTGGTGGGGGGTGACCCTTGGACCA ATGGCTCAGGGCTTGCTCTCCCAGCGGTACTACCACCGAGGCCACGTGGACCCGGCCAACGACACATTTGACA TCACCCTCTTGGAAAGCAGCTCCAGTTACAAGAACCTCACGCTCAAATTCCACAAGCTGGTCAATGTCACCATCC ACTTCCGGCTGAAGACCATTAACCTCCAGAGCCTCATCAATAATGAGATCCCGGACTGCTATACCTTCAGCGTCC TGATCACGTTTGACAACAAAGCACACAGTGGGCGGATCCCCATCAGCCTGGAGACCCCAGGCCCACATCCAGGAGT GTAAGCACCCCAGTGTCTTCCAGCACGGAGACACAGCTTCCGGCTCCTGTTTGACGTGGTGGTCATCCTCACCT GCTCCCTGTCCTCCTCTGCGCCCGCTCACTCCTTCGAGGCTTCCTGCTGCAGAACGAGTTTGTGGGGTTCA TGTGGCGGCAGCGGGACGGGTCATCAGCCTGTGGGAGCGGCTGGAATTTGTCAATGGCTGGTACATCCTGCTCG TCACCAGCGATGTGCTCACCATCTCGGGCACCATCATGAAGATCGGCATCGAGGCCAAGAACTTGGCGAGCTACG ACGTCTGCAGCATCCTCCTGGGCACCTCGACGCTGCTGGTGTGGGGTGGGCGTGATCCGCTACCTGACCTTCTTCC ACAACTACAATATCCTCATCGCCACACTGCGGGTGGCCCTGCCCAGCGTCATGCGCTTCTGCTGCTGCGTGGCTG ${\tt TCATCTACCTGGGCTACTGCTTCTGTGGCTGGATCGTGCTGGGGCCCTATCATGTGAAGTTCCGCTCACTCTCACTCTCCACTCTCCACTCTCCACTCTCCACTCTCCACTCTCCACTCTCACTCACTCACTCTCACTCTCACTCTCACTCTCACTCTCAC$ TGGTGTCTGAGTGCCTGTTCTCGCTCATCAATGGGGACGACATGTTTGTGACGTTCGCCGCCATGCAGGCGCAGC AGGGCCGCAGCAGCCTGGTGTGGCTCTTCTCCCAGCTCTACCTTTACTCCTTCATCAGCCTCTTCATCTACATGG TGCTCAGCCTCTTCATCGCGCTCATCACCGGCGCCTACGACACCATCAAGCATCCCGGCGGCGCAGGCGCAGAGG AGAGCGAGCTGCAGGCCTACATCGCACAGTGCCAGGACAGCCCCACCTCCGGCAAGTTCCGCCGCGGGAGCGGCT $\texttt{CGGCCTGCAGCCTTCTGCTGCTGCGGAAGGGACCCCTCGGAGGAGCATTCGCTGCTGGTGAAT} \underline{\textbf{TGA}} \underline{\textbf{TTCGACC}}$ GCTTTTAAGGATCGGCTCCCTGTCGCGCCCGAGGAGGCCTGGACCTTTCGTGTCGGACCCTTGGGGGCGGGGAG ACTGGGTGGGGAGGGTGTTGAATAAA

FIGURE 2329

MTAPAGPRGSETERLITPNPGYGTQAGPSPAPPTPPEEEDLRRRLKYFFMSPCDKFRAKGRKPCKLMLQVVKILV VTVQLILFGLSNQLAVTFREENTIAFRHLFLLGYSDGADDTFAAYTREQLYQAIFHAVDQYLALPDVSLGRYAYV RGGGDPWTNGSGLALCQRYYHRGHVDPANDTFDIDPMVVTDCIQVDPPERPPPPPSDDLTLLESSSSYKNLTLKF HKLVNVTIHFRLKTINLQSLINNEIPDCYTFSVLITFDNKAHSGRIPISLETQAHIQECKHPSVFQHGDNSFRLL FDVVVILTCSLSFLLCARSLLRGFLLQNEFVGFMWRQRGRVISLWERLEFVNGWYILLVTSDVLTISGTIMKIGI EAKNLASYDVCSILLGTSTLLVWVGVIRYLTFFHNYNILIATLRVALPSVMRFCCCVAVIYLGYCFCGWIVLGPY HVKFRSLSMVSECLFSLINGDDMFVTFAAMQAQQGRSSLVWLFSQLYLYSFISLFIYMVLSLFIALITGAYDTIK HPGGAGAEESELQAYIAQCQDSPTSGKFRRGSGSACSLLCCCGRDPSEEHSLLVN

FIGURE 2330

AACAGTATTTTCCTTTTCAACACATCTATTGAAAGTGTTGGATAAATGCAGGATGTTAATATGCTATAAACATAA AGTCTGTTTTTAAAAAATAGCATTTGAAAATCATGAAGGGCTTTTTGTTTTCTTTTGTTTTGTATATATGTTTATT GGTAACAGGTGACACTGGAAGCA**ATG**AACACCACAGTGATGCAAGGCTTCAACAGATCTGAGCGGTGCCCCAGAG ACACTCGGATAGTACAGCTGGTATTCCCAGCCCTCTACACAGTGGTTTTCTTGACCGGCATCCTGCTGAATACTT TGGCTCTGTGGGTGTTTGTTCACATCCCCAGCTCCTCCACCTTCATCATCTACCTCAAAAAACACTTTGGTGGCCG ACTTGATAATGACACTCATGCTTCCTTTCAAAATCCTCTCTGACTCACACCTGGCACCCTGGCAGCTCAGAGCTT TTGACAGATTCCTCAAGATCATCAGACCTTTGAGAAATATTTTTCTAAAAAAACCTGTTTTTGCAAAAACGGTCT CAATCTTCATCTGGTTCTTTTTGTTCTTCATCTCCCTGCCAAATATGATCTTGAGCAACAAGGAAGCAACACCAT CGTCTGTGAAAAAGTGTGCTTCCTTAAAGGGGCCTCTGGGGCTGAAATGGCATCAAATGGTAAATAACATATGCC AGTTTATTTTCTGGACTGTTTTTATCCTAATGCTTGTGTTTTATGTGGTTATTGCAAAAAAAGTATATGATTCTT ATAGAAAGTCCAAAAGTAAGGACAGAAAAAACAACAAAAAAGCTGGAAGGCAAAGTATTTGTTGTCGTGGCTGTCT GTAGACTGCAAAATCAACTGTTTATTGCTAAAGAAACAACTCTCTTTTTTGGCAGCAACTAACATTTGTATGGATC CCTTAATATACATATTCTTATGTAAAAAATTCACAGAAAAGCTACCATGTATGCAAGGGAAAAGACCACAGCAT ${ t CAAGCCAAGAAAATCATAGCAGTCAGACAGACAACATAACCTTAGGC{ t TGA}{ t CAACTGTACATAGGGTTAACTTCTA}$ TTACATTTTATTATCCTGGTGTACAGAAAAGATTATATAAAATTTAAATCCACATAGATCTATTCATAAGCTGAA TTTTTAATTTCAAGAGCATTTCACTTTAACATTTTGGAAAAGACTAAGGAGAAACGTATATCCCTACAAACCTCC TGTGCTGAAAGAAAAAAAAACGCCCAACTCTTGAAGTCCATTGCTGAAAACTGCAGCCAGGGGTTGAAAGGGAT GCAGACTTGAAGAGTCTGAGGAACTGAAGTGGGTCAGCAAGACCTCTGAAATCCTGGGTAAAGGATTTTCTCCTT ACAATTACAAACAGCCTCTTTCACATTACAATAATATACCATAGGAGGCACAAGCACCATTATTAAGCCACTTTG CTTACACCTTAAGTGTGTACAATTCAAGTGTGAGAATGCTGTGTTAACTATTCTTTGGAATTCTCCTTCTGTCCA GCAAATACTCTAATGATGGTTAAACATGGCACCTACTCAGCAATGCCTTCCTGGACCACAACCCCTATCCCCCTG CCCCACCCTCCTCATTAAAAACAAATACTTCTACTGTTTGGGTGTGATAGGGTTCTCAATGCAGATCTCCCTT CTTGGTATCTCCCATAATACGACCTACAGTCCATGGTCTACAGATGTTTTAAATAGAATTGCTATTCTCGATACA TACAAAGACGTAATTGCTGACCCACAATCAGTAACATCCATATTGGGAGATTTTTCAAAGGATGGTGACCCTGCT TGTATTTATTTACCTTGGTATTTTTCTTGCATCCTTCTGTGATTCAAAAAAGTAAAATGTGGCTTTCTGAAATG ATGGATAAGAGTCTACATCTTCTAGAAAAAATACATAAAGGAGTAGTTAAGCTCTGTAAATGTGCCACGAGCTCC AACACGACCATCGTAGGGTGAAGCCCACGTTTTCTTCCATGGCCTCAAAGGCCCTAGAACTTGCCTACCTTTCTG GCCTTACCTCCTAGCTACTTATCCATCTCTTGAACTTTATACTCTTGTATAAATTTCTAACTTTCAGAAAATGCC ATACTCTGTTTTGGCACCACACATGTATATTTCCCCCTGGTACACTTGGAAGACTCTTATCCATCTGTGAAACCC TATGTTGTCATCACTTGGTCCATGAAATATTACCTGGCCAATATCCCACCATCACCTCAAACCCAATCACCCCT CCTCTGTATGCTGTCACACCTATATTATTAAACTTATCACATTGCATTGTAATTACTTCCTGACCTTTGTATCTA AAAGCCC

2619/2825 FIGURE 2331

MNTTVMQGFNRSERCPRDTRIVQLVFPALYTVVFLTGILLNTLALWVFVHIPSSSTFIIYLKNTLVADLIMTLML PFKILSDSHLAPWQLRAFVCRFSSVIFYETMYVGIVLLGLIAFDRFLKIIRPLRNIFLKKPVFAKTVSIFIWFFL FFISLPNMILSNKEATPSSVKKCASLKGPLGLKWHQMVNNICQFIFWTVFILMLVFYVVIAKKVYDSYRKSKSKD RKNNKKLEGKVFVVVAVFFVCFAPFHFARVPYTHSQTNNKTDCRLQNQLFIAKETTLFLAATNICMDPLIYIFLC KKFTEKLPCMQGRKTTASSQENHSSQTDNITLG

2620/2825 FIGURE 2332

GCCGCCGCCGCTGCGAGTCAACGTGGTGCTCAGCGGCCTCCTCGGCAAGTTGTTTCCAGGCCCAGCGCGAGCGTC GCAACTCCGGCACGAGGCCAACCGACTGTACCGCGAGCGCCAGGTGGAGGCGCCACTGCTCAAGTACAACGAGGC GAATGCACTGCATGATGCAGAAATAGCATGTAAGCTCCGCCCGATGGGTTTTAAGGACAATCTGGAGCTCCCACA TTGTTCTAGTCAGGAGGAGCAGCCAGCCAGGGGAGATGGCAGCTGATGGACCCAGCTAAAGTGAAGGGGGA $\tt TGGTCAGCAGCACCACATGAAAGACCAGGAAGAAGAGGAGGAGAAGTGGGATGCTACCTCTCCAAAAGCTGCTTC$ CAGCAAGACTGGAAAATGCCAGGAAAAGAAAAGGAAACATTGCCAGATTGAATCCCAAGAAGAAAACGGGGATGCC TAATAAAGCCTCCAAGCAAGATCCTCCCACTGATCAGGGGGACAAACCTGCTCTCAGTTTACCACTTGCATCTTT CGACGCATCTGACCTTGAATGCGCTCTATGTATGAGATTATTCTATGAGCCAGTCACAACACCTTGCGGGCATAC TTTTTGCTTAAAATGCCTAGAAAGATGCCTAGATCACAACGCAAAGTGTCCATTGTGCAAAGACGGTCTTTCACA GAAGGAACGAAGGAAGCTTTATGAAGAGGAAATGGAAGAACTTTCTAACCTTAATAAGAATGTGCCTATTTTCGT GTGTACTATGGCCTATCCCACCGTTCCTTGTCCCCTGCACATCTTTGAGCCTTGTTACCGCCTGATGATTCGTAG $\verb|ATGCATTGAGACAGGCACGAGACAGTTTGGCATGTGCCTTGGAGATCCTGTCAAAGGGTTTGCAGAATATGGCTG| |$ ${\tt CATCCTAGAGATCAGAAATGTTCAATTCTTTGCTGATGGCCGCTCAGTGGTTGACAGCATAGGCAAGAGGCGCTT}$ CAGGGTGCTCCATCAGAGCCAGCGGGATGGCTACAACACAGCCGACATTGAATACATTGAAGACCAAAAGGTTCA $\tt GGGAGAGGATTGTGCTGAGCTCATGGGATTACATAACTGTGTCTATCAGCAAGCGTCATTGTGGTTTCATTCGCT$ CAAATTATCCCTAAAGAATCGGATACTCAATCACTTTGGTCCCATGCCGGAGAAAGACGCCGATCCTCAGATGAA $\tt CCCGAATGGCCCAGCCTGGTGCTGGTGGATGTTAGCAGTTCTTCCCTTGGAAAGCCGAGCTCAGCTCCCCTTCCT$ ${\tt AGCAATGAGGTCCTTAAAGGACAGACTGAATGGTATTCGACGAGTCCTGGCCTTCATATCCCGAAACCAAAAC\underline{TA}$ $\underline{\mathbf{G}}$ TGAGTGGATTGCCGAAGAGAGCTCCCACCTTCCCCACTGCCGTCGGGGGGAGTCTTCTTGTAAATATATCTAA TTGCAATAACATCTTAACAGAAGGGGGTGTCAAACAGAGGCATCAGCCTGCTGTTGATCACAGAGAAAATTGAG TAGAAAGACCAAAAGAATGTGACCTATTTGAAACTTTCTGTCTTAAGATGCTTCTTGACATGCTGCATAACTACA TAAACAGCAGAGGTGTTTAAGAGCCCAGAAAAACATAATTTGATTTTAACATTAAAAATTTCCAAAAGTTTAAAAA AAAAAAAAAAAA

2621/2825 FIGURE 2333

MVATGRARGARRAGQQPPPPLRVNVVLSGLLGKLFPGPARASQLRHEGNRLYRERQVEAALLKYNEAVKLAPNDH LLYSNRSQIYFTLESHENALHDAEIACKLRPMGFKDNLELPHCSSQEEAAARGDGSSLMDPAKVKGDGQQHHMKD QEEEEEKWDATSPKAASSKTGKCQEKKRKHCQIESQEETGMPNKASKQDPPTDQGDKPALSLPLASFDASDLECA LCMRLFYEPVTTPCGHTFCLKCLERCLDHNAKCPLCKDGLSQCLASRKYSKNVIMEELIAKFLPEELKERRKLYE EEMEELSNLNKNVPIFVCTMAYPTVPCPLHIFEPCYRLMIRRCIETGTRQFGMCLGDPVKGFAEYGCILEIRNVQ FFADGRSVVDSIGKRRFRVLHQSQRDGYNTADIEYIEDQKVQGEDCAELMGLHNCVYQQASLWFHSLKLSLKNRI LNHFGPMPEKDADPQMNPNGPAWCWWMLAVLPLESRAQLPFLAMRSLKDRLNGIRRVLAFISRNQN

2622/2825 FIGURE 2334A

GACAGACAGG<u>ATG</u>GACTTCCTCCGGCTATACCTCCCTGGGCTGCACCAGGCCTTGAGGGGGGCACTGGATTCCCT CGGCACCTTTGTCTCCTACCTCCTGGGAGATGCAGTCCCCACTGTAGAGCGGGAGGCGCAGGCGGCTGAGGAACT GGGGGTGGTGGCGGTGGGAAAGACAGGGAAGATTGTAGAGGAGGAAGCCCAGGAGGACCTGGAGGGCCTTAGAGG CAGCCAAAACGAGGGGGCTGGAAGGCTGAGAGGGCCTGGAGATGACAGAAGACATGAAGTGGGGAGCTCAGCTGT AGAACAGACCTGGGGGCTGGGGAGATGGCAGCTCCCATGGGTCCCAAGCAGAGAGGCAGGACAGTGGGGCTGGGGA GGCTTGCCAAGACAGGAGCGGCCAAGCCCAGGAGAGGCAGGAGTCCCATGAGCAGGAAGTGAACAGAGAAGAGAGA GCTGAGAAGCTGGGAACAGGAGGAGGAGGAAGAAGAGGTCAGGGCAAGAGAGCCAGGGATGGCCAGAGGGGCGGA GTCAGAGTGGACCTGGCATGGGGAGACGGAGGGGAAGGCTGGTGCTGTTGGGCCAAAGGCGGCAGGGGACAACCG GGAGATGGAGCAGGGGGTCAGGGGGGCAGATGCAGGGGGAAACTGAGGAGCCTGGGGCCGAAGGGGCTGGGAAAGG AGAAGAGGTGGTAGTGGTGGAGAAGGCCTGTGAAAGCACTAGGGCATGGGGGACGTGGGGCCCAGGGGCAGAGCC TGAGGACTGGGGAATCTTAGGCAGAGAGGGCCAGGACAACCCCAGGTAGGGAAGAGGCCAGGGCAATTTTAGA TGGGGAGGAGCCAGGACAATCTCAGGCGGGAGGAGGCTGAGACAGCCTCAGGCGGGGAGGAGGCTGAAACAGC CTCAGGCGGGGAGGCCGGGACAGCCTCGGGAGGGGAGGCCGGGATATCCTCAGGCGGGGAGGCTGGGAC AGCCTCAGGAGGGGAGGAGGCCGGGACAGCCTCAGGAGGGGACGAGGCCTGGACAACCTCAGGCAAAGAGGAGGC TGACCTGCTGGGAGTCAGACAGACTCAATATGGAGCAGTTCCAGGAGAAAGGCTCCTAGAGGCTACTGGAAAAGT CTGGGTCCTAGAGGAGGAGGGGGATGAGGAGAGAGAGGCTGAGGTGAGCCCTTTCCCCAAACAGGCCCAGGTCCT GGAGAGCTTTGAGGGCCAGGTAGACCTGCGTGGTAAGGAGGCTGAGATGAGGCAGGACTTGGGGATCAGGGCCGA CCGGGCCAGGATGGAAGAGCTGGTACAGGCAGAGGAGGCCCAGGAGGAGAGAGGGAGCAGCAGGGATCCAGTGGC TGAGCTGCCCTCAGATGGAGAGGCTGAAGGCACTGCCGACTTGGAGGCCAACTCCAGAGGCCAGGCCTGAGGAGA GCTCACAGGGGAGGAGTGAGGCGGCCCAGACTAGCTGTGGCCTACTGGGCGTGGAATGGGGTGGCCTCACACA CAGCGTCACCAAAGGCCAGGGACCTGAGCTGATGGGGGGTGCCCAGACCCAACTAAGCAACCCGAGGAAAGGGA GGCAGGGGAGGTGGAGCTCATGGGAGTTCTGGCCCTGAGCAAAGAGGAGCAGGAGAGGAGGAGCCTGGAGGCAGGTCC CAGGCACGCGGGGTCTGTAAAGCCTGAGGCCTCCGAGGCCTTCCCAGGAGCCTGGGAAAACCGCACGAGAAAGGA CATGGAGAGAGAAATACTCAGGAGGATGCGGCCGATGGCGAGCAGCGGGAGGAGGAGACTGCGGGAGGCCA CACAGGGGCAGACGCAGGGCCTTGCCCGTCACTGGGAGAGGCCTATGCCAGAGAAACTGAGGATGAGGAGGCGGA GGCTGACAGAACATCCAGAAGAGGCTGGAGGCTGCAAGCGGTGGCTGTGGGCCTCCCGGACCGTGAGGATGCACA GACTGGCTCTGTGGCTGCTGGGATTATGGGGGGTGATGTGGTCCCACACATCAGCGCTGCTGGCGCTGGTGAAGC GCAAGAATTTGGTCTGGAGGGCTCAGCAGAGGAAGAGGTGACTGGCAGAGGCCAAGTAGAGGCTTTTGAGTC CAGGGAGGAGGACCTTGGGGAGGGCGGGTAGAGGCCGAGGAATCTGCAGGCGCAGAGGACAGCTGTGGGCTGGA TCCCGCGGGCTCCCAGACAGCGAGGGCAGAGGGGATGGGAGCCATGGTGGAGGCTGGGGGGGCTTCTAGAAAAGTG CTACCACCCTGAGGGAGAGGCACCAAGGCTCCTTGATGCAGAGGGTCTCATGGTGACCGGGGGCCGGAGGGCAGA GGCCAAGGAGACTGAGCCAGAAAGCCTGGAACATGTCAGGGGCCAGGAGGAGCAGCCAACACACCAGGCCCCTGC AGAAGCTGCGCCGGAGTCAGTCGGGGAAGCCGAGACGGCTGAGGCCATGGGCAGTGCCAGAGGAGGTGCTGCCAA CAGCTGGAGCGAGGCCCCGCTCCCGGGTCCCTCCTAGACGTCTCTGTCCCAAGGAGTCGCGTGCACCTCTCGAG AAGCTCCTCACAGCGTCGCTCCCGGCCCTCTTTTCGTCGGACTCCGGCCTGGGAGCAGCAGGAGGAGCCCCCAGC CCCCAACCCTCCTGAGGAGGAGCTGTCAGCTCCTGAGCAGAGACCCCTCCAGCTGGAGGAACCCCTGGAGCCAAG CCCTCTGAGGCATGATGGGACCCCGGTGCCAGCCAGGAGAAGGCCCCTGGGACACGGGTTTGGCCTCGCGCACCC CAGGCCCTGAGTGGGTGCCAGAAGGCTTGCTCCAATGCCACTGAGCCCTGCTCCCTCTGCCACTGTGGACACATC TGAACTTAAGGAGTCTGATTCTCCGACACAGGCTGGTGGACCACCTACCCCACTGAGACCACCTCTCAGGGTGCC TGCCCTGGTTCCTCCCCAGCCTGAGTCAGCTGTCTGGACTGCAAGGAGGCTGGGCACGGGGGCTCACGCCTGTCA

2623/2825 FIGURE 2334B

2624/2825 FIGURE 2335

FIGURE 2336

GCCTGTCGCAGGCGTGCAGGGACCTGGACTCCGCCTCGTCCCCGGGGCTCGGGCAGCCGAGCCATCGCGAAAC TGTGGGGCCCGCGCGCGCTGTCGGCGCACACGCTGCTGTTCGACCTGCCGCCCCGCGCTGCTCGGAGAGCTCTGC GTTCGTCATATTGAAAAGTATGTAGACCAAGGTAAAAGTGGAACAAGAGAATTACTTTGGTCCTGGGCACAGAAA AACAAGACCATCGGTGACCTTTTACAGGTCCTCCAGGAGATGGGACATCGTCGAGCTATTCATTTAATTACAAAC TATGGAGCAGTGTTGAGTCCTTCAGAGAAGAGTTATCAGGAAGGTGGATTTCCAAATATATTATTCAAGGAAACA GCCAATGTCACCGTGGATAATGTTCTTATTCCTGAACATAATGAAAAAGGAGTACTGCTTAAATCTTCCATCAGC TTTCAAAATATCATAGAAGGAACTAGAAATTTCCACAAAGACTTCCTAATTGGAGAAGGAGAGATTTTTGAGGTA TACAGAGTGGAGATTCAAAACCTAACATATGCTGTCAAATTATTTAAACAGGAGAAAAAAATGCAGTGTAAGAAG CATTGGAAGAGGTTTTTATCTGAGCTTGAAGTTTTACTACTGTTTCATCACCCAAACATACTAGAGTTGGCTGCA TATTTTACAGAGACTGAGAAGTTCTGTCTGATTTATCCATACATGAGAAATGGAACACTTTTTGACAGATTGCAG TGTGTAGGTGACACGGCCCCACTCCCTTGGCACATTCGAATCGGTATATTAATAGGAATATCCAAAGCCATTCAC TACCTGCACAACGTTCAACCATGCTCGGTCATCTGTGGCAGTATATCAAGTGCAAACATCCTTTTGGATGATCAG TTTCAACCCAAACTAACTGATTTTGCCATGGCACACTTCCGGTCCCACCTAGAACATCAGAGTTGTACCATAAAT ATGACCAGCAGCAGCAGTAAACATCTGTGGTACATGCCAGAAGAGTACATCAGACAGGGGAAACTTTCCATTAAA ACAGATGTCTACAGCTTTGGAATTGTAATAATGGAAGTTCTAACAGGATGTAGAGTAGTGTTAGATGATCCAAAA AAGAAAGTGCCTCCCTGCCCTCGGAATTTCTCTGCCAAGCTCTTCTGTTTGGCAGGCCGGTGTGCTGCAACGCGG GCAAAGTTAAGACCATCAATGGATGAAGTTTTAAATACTCTTGAAAGTACTCAAGCCAGCTTGTATTTTGCTGAA GATCCTCCCACATCACTAAAGTCCTTCAGGTGTCCTTCTCCTCTATTCCTGGAGAATGTACCAAGTATTCCAGTG GAAGATGATGAAAGCCAGAATAACAATTTACTACCTTCTGATGAAGGCCTGAGGATAGACAGAATGACTCAGAAA GAAGCTTGCAACATGCCCAGTTCTTCTTGTGAAGAAAGTTGGTTCCCAAAGTATATAGTTCCATCCCAGGACTTA AGGCCCTATAAGGTAAATATAGATCCTTCTTCAGAAGCTCCAGGGCATTCTTGCAGGAGCAGGCCAGTGGAGAGC AGCTGTTCCTCCAAATTTTCCTGGGATGAATATGAACAGTACAAAAAAGAA<u>TAA</u>ATTCTACCAGAAGATAAAGAA AAAAGCAAGTATTGCATAGGCACCTGAGCATAGGTATGACCTTGGGAAGACATTGGCTCCATAAGCAATGCCAAG AGAATGATCAATAGTGAGTTTGGGTGATGCAGATAAACAATCTGGATAATTCCATTTCTTTTTTCCCAAACCCTC AAACAGAGTGCCTTAAAAAATTGTTTTATCAGGATAATTGTCTCATGACCAAATCCACGCTCAATTAGAGCCATT GTAATGTCCTCTCCATCATCCTCAGTGTGAGTCCTCAGAGCCTCCATCTGCCAAGAACATTCAGTTGGATTCCAT CGTTTGGTTTAGCTTGCTTGCACGGGTTGTAGGAAATG

2626/2825 FIGURE **2337**

MAGNCGARGALSAHTLLFDLPPALLGELCAVLDSCDGALGWRGLAERLSSSWLDVRHIEKYVDQGKSGTRELLWS WAQKNKTIGDLLQVLQEMGHRRAIHLITNYGAVLSPSEKSYQEGGFPNILFKETANVTVDNVLIPEHNEKGVLLK SSISFQNIIEGTRNFHKDFLIGEGEIFEVYRVEIQNLTYAVKLFKQEKKMQCKKHWKRFLSELEVLLLFHHPNIL ELAAYFTETEKFCLIYPYMRNGTLFDRLQCVGDTAPLPWHIRIGILIGISKAIHYLHNVQPCSVICGSISSANIL LDDQFQPKLTDFAMAHFRSHLEHQSCTINMTSSSSKHLWYMPEEYIRQGKLSIKTDVYSFGIVIMEVLTGCRVVL DDPKHIQLRDLLRELMEKRGLDSCLSFLDKKVPPCPRNFSAKLFCLAGRCAATRAKLRPSMDEVLNTLESTQASL YFAEDPPTSLKSFRCPSPLFLENVPSIPVEDDESQNNNLLPSDEGLRIDRMTQKTPFECSQSEVMFLSLDKKPES KRNEEACNMPSSSCEESWFPKYIVPSQDLRPYKVNIDPSSEAPGHSCRSRPVESSCSSKFSWDEYEQYKKE

2627/2825 FIGURE **2338**

ACAGCTACTGCTGCCGCAGCCGCCTCATCGGCCGCCCCAAGCGCGGGCTCCAGCTCCGGGACGACGACCACG ACGACGACCACGACGGGGGGTCCTGATCGCCGTTCTCTCGGAAGTTTCACTTACCATCGACCACTCT CTGATTCCGGAGGAGGGCTCTCGCCCACCCCATCCATGCAGGATGGGCTCGACCTGCCCAGTGAGACGGACTTA CGCATCCTGGGCTGCGAGCTCATCCAGGCCGCCGGCATTCTCCTCCGGCTGCCGCAGGTGGCGATGGCAACGGGG CAGGTGTTGTTTCATCGTTTTTTCTACTCCAAATCTTTCGTCAAACACAGTTTCGAGATTGTTGCTATGGCTTGT ATTAATCTTGCATCAAAAATCGAAGAAGCACCTAGAAGAATAAGAGATGTGATTAATGTATTCCACCACCTCCGC CAGTTAAGAGGAAAAAGGACTCCAAGCCCCCTGATCCTTGATCAGAACTACATTAACACCAAAAATCAAGTTATC AAAGCAGAGAGGGGGGGCTAAAGGAGTTGGGATTTTGTGTTCATGTCAAGCATCCTCATAAGATCATTGTTATG CGAACCAATGTGTTTGTTCGATTTCAACCAGAGACTATAGCATGTGCTTGCATCTACCTTGCAGCTAGAGCACTT CAGATTCCGTTGCCAACTCGTCCCCATTGGTTTCTTCTTTTTGGTACTACAGAAGAGGGAAATCCAGGAAATCTGC GTAGCCTTACAAGAAGCCAAATTAAAAGCAAAGGGATTGAATCCGGATGGAACTCCAGCCCTTTCAACCCTGGGT GGATTTTCTCCAGCCTCCAAGCCATCATCACCAAGAGAAGTAAAAGCTGAAGAGAAATCACCAATCTCCATTAAT GTGAAGACAGTCAAAAAAGAACCTGAGGATAGACAACAGGCTTCCAAAAGCCCTTACAATGGTGTAAGAAAAGAC CCAAGAAGACACTATAATAATAGGCGGAGTCGATCTGGAACATACAGCTCGAGATCAAGAAGCAGGTCCCGCAGT CACAGTGAAAGCCCTCGAAGACATCATAATCATGGTTCTCCTCACCTTAAGGCCAAGCATACCAGAGATGATTTA AAAAGTTCAAACAGACATGGTCATAAAAGGAAAAAATCTCGTTCTCGATCTCAGAGCAAGTCTCGGGATCACTCA GATGCAGCCAAGAAACACAGGCATGAAAGGGGACATCATAGGGACAGGCGTGAACGATCTCGCTCCTTTGAGAGG CTGATTAGGATTTGATTTCTTGAAACCCTCTAGGTCTCTAGAACACTGAGGACAGTTTCTTTTGAAAAGAACTAT GTTAATTTTTTTGCACATTAAAATGCCCTAGCAGTATCTAATTAAAAACCATGGTCAGGTTCAATTGTACTTTAT TATAGTTGTGTATTGTTATTGCTATAAGAACTGGAGCGTGAATTCTGTAAAAATGTATCTTATTTTTATACAGA TAAAATTGCAGACACTGTTCTATTTAAGTGGTTATTTGTTTAAATGATGGTGAATACTTTCTTAACACTGGTTTG TCTGCATGTGTAAAGATTTTTACAAGGAAATAAAATACAAATCTTGTTTTT

FIGURE 2339

MASGPHSTATAAAAASSAAPSAGGSSSGTTTTTTTTTTGGILIGDRLYSEVSLTIDHSLIPEERLSPTPSMQDGLD LPSETDLRILGCELIQAAGILLRLPQVAMATGQVLFHRFFYSKSFVKHSFEIVAMACINLASKIEEAPRRIRDVI NVFHHLRQLRGKRTPSPLILDQNYINTKNQVIKAERRVLKELGFCVHVKHPHKIIVMYLQVLECERNQTLVQTAW NYMNDSLRTNVFVRFQPETIACACIYLAARALQIPLPTRPHWFLLFGTTEEEIQEICIETLRLYTRKKPNYELLE KEVEKRKVALQEAKLKAKGLNPDGTPALSTLGGFSPASKPSSPREVKAEEKSPISINVKTVKKEPEDRQQASKSP YNGVRKDSKRSRNSRSASRSRSRTRSRSRSHTPRHYNNRRSRSGTYSSRSRSRSRSHSESPRRHHNHGSPHLKA KHTRDDLKSSNRHGHKRKKSRSRSQSKSRDHSDAAKKHRHERGHHRDRRERSRSFERSHKSKHHGGSRSGHGRHR R

2629/2825 FIGURE 2340A

GTAGACAGATCCAGGCTCACCAGTCCTGTGCCACTGGGCTTTTGGCGTTCTGCACAAGGCCTACCCGCAGATGCC $\tt ATGCCTGCTCCCCAGCCTAATGGGCTTTG\underline{ATG} \tt GGGGGAAGAGGGTGGTTCAGCCTCTCACGATGAGGAGGAAAGA$ GCAAGTGTCCTCCGGACATTCTCCGGGTTGTGAAATGTGCTCGCAGGAGGCCTTTTCAGGCACAGAGGAGCCAG $\tt CTGGTCGAGCTGCTGGTCTCAGGGTCCCTGGAAGGCTTCGAGAGTGTCCTGGACTGGCTGCTGTCCTGGGAGGTC$ CTCTCCTGGGAGGACTACGAGGGCTTCCACCTCCTGGGCCAGCCTCTCTCCCACTTGGCCAGGCGCCTTCTGGAC ACCGTCTGGAATAAGGGTACTTGGGCCTGTCAGAAGCTCATCGCGGCTGCCCAAGAAGCCCAGGCCGACAGCCAG TCCCCCAAGCTGCATGGCTGCTGGGACCCCCACTCGCTCCACCCAGCCCGAGACCTGCAGAGTCACCGGCCAGCC ATTGTCAGGAGGCTCCACAGCCATGTGGAGAACATGCTGGACCTGGCATGGGAGCGGGGTTTCGTCAGCCAGTAT GAATGTGATGAAATCAGGTTGCCGATCTTCACACCGTCCCAGAGGGCCAAGAAGGCTGCTTGATCTTGCCACGGTG AAAGCGAATGGATTGGCTGCCTTCCTTCTACAACATGTTCAGGAATTACCAGTCCCATTGGCCCTTTGGAA GCTGCCACATGCAAGAAGTATATGGCCAAGCTGAGGACCACGGTGTCTGCTCAGTCTCGCTTCCTCAGTACCTAT GATGGAGCAGAGACGCTCTGCCTGGAGGACATATACACAGAGAATGTCCTGGAGGTCTGGGCCAGATGTGGGCATG GCTGGACCCCGCAGAAGAGCCCAGCCACCCTGGGCCTGGAGGAGCTCTTCAGCACCCCTGGCCACCTCAATGAC GATGCGGACACTGTGCTGGTGGTGGGTGAGGCGGCAGTGGCAAGAGCACGCTCCTGCAGCGGCTGCACTTGCTG TGGGCTGCAGGGCAAGACTTCCAGGAATTTCTCTTTGTCTTCCCATTCAGCTGCCGGCAGCTGCAGTGCATGGCC AAACCACTCTCTGTGCGGACTCTACTCTTTGAGCACTGCTGTTGGCCTGATGTTGGTCAAGAAGACATCTTCCAG TTACTCCTTGACCACCCTGACCGTGTCCTGTTAACCTTTGATGGCTTTGACGAGTTCAAGTTCAGGTTCACGGAT CGTGAACGCCACTGCTCCCCGACCGACCCCACCTCTGTCCAGACCCTGCTCTTCAACCTTCTGCAGGGCAACCTG $\tt CTGAAGAATGCCCGCAAGGTGGTGACCAGCCGTCCGGCCGCTGTGTCGGCGTTCCTCAGGAAGTACATCCGCACC$ GAGTTCAACCTCAAGGGCTTCTCTGAACAGGGCATCGAGCTGTACCTGAGGAAGCGCCATCATGAGCCCGGGGTG ATGGTGTCCAAATGCCACCAGGAACTGTTGCTGCAGGAGGGGGGGTCCCCAAAGACCACTACAGATATGTACCTG $\tt CTGATTCTGCAGCATTTTCTGCTGCATGCCACCCCCCAGACTCAGCTTCCCAAGGTCTGGGACCCAGTCTTCTT$ $\tt CGGGGCCGCCTCCCACCCTCCTGCACCTGGGCAGACTGGCTCTGTGGGGCCTGGGCATGTGCTACGTGTTC$ GTCGTGCCAGGGAGTACGGCGCCCCTGGAATTCCTTCACATCACTTTCCAGTGCTTCTTTGCCGCGTTCTACCTG GCACTCAGTGCTGATGTGCCACCAGCTTTGCTCAGACACCTCTTCAATTGTGGCAGGCCAGGCAACTCACCAATG GCCAGGCTCCTGCCCACGATGTGCATCCAGGCCTCGGAGGGAAAGGACAGCAGCGTGGCAGCTTTGCTGCAGAAG GCCGAGCCGCACAACCTTCAGATCACAGCAGCCTTCCTGGCAGGGCTGTTGTCCCGGGAGCACTGGGGCCTGCTG GCTGAGTGCCAGACATCTGAGAAGGCCCTGCTCCGGCGCCAGGCCTGTGCCCGCTGGTGTCTGGCCCGCAGCCTC CGCAAGCACTTCCACTCCATCCCGCCAGCTGCACCGGGTGAGGCCCAAGAGCGTGCATGCCATGCCCGGGTTCATC CACCTCAAGTTGACATTTTGCAGTGTGGGCCCCACTGAGTGTGCTGCCCTTGGCCTTTGTGCTGCAGCACCTCCGG CGGCCCGTGGCCCTGCAGCTGGACTACAACTCTGTGGGTGACATTGGCGTGGAGCAGCTGCTTGCCTTGGT GTCTGCAAGGCTCTGTATTTGCGCGATAACAATATCTCAGACCGAGGCATCTGCAAGCTCATTGAATGTGCTCTT CTCCTTGCATGCAGGCAGAACTTCTTGGCATTGAGGCTGGGGAATAACTACATCACTGCCGCGGGAGCCCAAGTG GCCCAGGCCCTGGCTGAAGCCTTGGGTGATCACCAGAGCTTGAGGTGGCTCAGCCTGGTGGGGAACAACATTGGC AGTGTGGGTGCCCAAGCCTTGGCACTGATGCTGGCAAAGAACGTCATGCTAGAAGAACTCTGCCTGGAGGAGAAC CATCTCCAGGATGAAGGTGTATGTTCTCTCGCAGAAGGACTGAAGAAAAATTCAAGTTTGAAAATCCTGAAGTTG TCCAATAACTGCATCACCTACCTAGGGGCAGAAGCCCTCCTGCAGGCCCTTGAAAGGAATGACACCATCCTGGAA GTCTGGCTCCGAGGGAACACTTTCTCTCTAGAGGAGGTTGACAAGCTCGGCTGCAGGGACACCAGACTCTTGCTT CATGTGTTGGCAGCCTCTTCAAAATGAGCCCTGTCCTGCCTAAGGCTGAACTTGTTTTCTGGGAACACCATAGGT $\texttt{CACCTTTATTCTGGCAGAGGGGGGGGGCATCAGTGCCCTCCAGGATAGACTTTTCCCAAGCCTACTTTTGCCATTGCATTGCCATTGCCATTGCCATTGCCATTGCCATTGCCATTGCCATTGCCATTGCCATTGCATTGCATTGCCATTGCATTGCCATTGCATTGCATTGCCATTGCATTGCATTGCCATTGCAT$ ACTTCTTCCCAAGATTCAATCCCAGGATGTACAAGGACAGCCCCTCCTCCATAGTATGGGACTGGCCTCTGCTGA

2630/2825 FIGURE 2340B

2631/2825 FIGURE 2341

MGEEGGSASHDEEERASVLLGHSPGCEMCSQEAFQAQRSQLVELLVSGSLEGFESVLDWLLSWEVLSWEDYEGFH LLGQPLSHLARRLIDTVWNKGTWACQKLIAAAQEAQADSQSPKLHGCWDPHSLHPARDLQSHRPAIVRRLHSHVE NMLDLAWERGFVSQYECDEIRLPIFTPSQRARRLLDLATVKANGLAAFLLQHVQELPVPLALPLEAATCKKYMAK LRTTVSAQSRFLSTYDGAETLCLEDIYTENVLEVWADVGMAGPPQKSPATLGLEELFSTPGHLNDDADTVLVVGE AGSGKSTLLQRLHLLWAAGQDFQEFLFVFPFSCRQLQCMAKPLSVRTLLFEHCCWPDVGQEDIFQLLLDHPDRVL LTFDGFDEFKFRFTDRERHCSPTDPTSVQTLLFNLLQGNLLKNARKVVTSRPAAVSAFLRKYIRTEFNLKGFSEQ GIELYLRKRHHEPGVADRLIRLLQETSALHGLCHLPVFSWMVSKCHQELLLQEGGSPKTTTDMYLLILQHFLLHA TPPDSASQGLGPSLLRGRLPTLLHLGRLALWGLGMCCYVFSAQQLQAAQVSPDDISLGFLVRAKGVVPGSTAPLE FLHITFQCFFAAFYLALSADVPPALLRHLFNCGRPGNSPMARLLPTMCIQASEGKDSSVAALLQKAEPHNLQITA AFLAGLLSREHWGLLAECQTSEKALLRRQACARWCLARSLRKHFHSIPPAAPGEAKSVHAMPGFIWLIRSLYEMQ EERLARKAARGLNVGHLKLTFCSVGPTECAALAFVLQHLRRPVALQLDYNSVGDIGVEQLLPCLGVCKALYLRDN NISDRGICKLIECALHCEQLQKLALFNNKLTDGCAHSMAKLLACRQNFLALRLGNNYITAAGAQVLAEGLRGNTS LQFLGFWGNRVGDEGAQALAEALGDHQSLRWLSLVGNNIGSVGAQALALMLAKNVMLEELCLEENHLQDEGVCSL AEGLKKNSSLKILKLSNNCITYLGAEALLQALERNDTILEVWLRGNTFSLEEVDKLGCRDTRLLL

2632/2825 FIGURE **2342**

GCTCGGTCGGCGGCCAGAGGACCCAGCGCCTGCCCGGCCGCCAGCGGCTTCTCTTCTTGCCCGTGGGCCTCAGCG GAAGACCGGGCGGCAGCGAAACCTCAGCACGCCGCTGCCCCTCTGCGCTCTCCGACGGTCTGGGGGCGCTGCGCC CTCGCGCCCCGGCGCCCGCGGCGCGTGTCACGTGCCTCACCGCTGCTCCTCCTCCTGCTAGTGCCCTCCCCGC GCTTGGCCGCCGCAGCCCGCGCAGCTCGGGGACTGGGAGCGCTCGCGCTCTGGGTATGCCGCACCCCCGG CCGGGCGCAGCGCGCGTGGAGGTGCTCACCGGGCGTCGCCGCTGCCGCCGCCCCTTCCCCAGTACCACGGCC CGGCGCCTGCACTCGTTTCCTGCAGGAGAGCTAAGCTTGTCTGCTGGATCCCTGCAGCTGGAGCGCAAAAGGA GAGATTTCACCTCTTCTGGGAGCAGGAAACTCTACTTCGACACTCATGCCTTAGTGTGCTTACTGGAAGACAATG AATCTCACTCTTTCATCCAGGCTGGAGTGCAGTGGCACAGTCTTGGCCTACTGCAACCCCCACCTCCCGGTTTCA AGCGATCCTCCCACCTCATCCTCCTGAGTAGCTGGGATTACAGGCATGCACCACCACCCTGGATAATTTTTCTG ${\tt TATTTTACTAGAGACGGGGTTTCACCATGTTGGCCAGGCTGGTCTCAAACTGCTGACCTCAAGTGATCCACCCA}$ ATGAACTCTTTTTTTAATTAAAATTTTTTAAAAATTTTTATTTACATTAAAATGGAGATGGGATCACTATGTTGCCC ATGCTGGTTCTGAACTCCTGGGCTCAAAGATCCTCCCGCCTTGGTCTCCCAGAGTGTTAGGATTACAGGCGTGAG CCACCACACCCAGCCAGTGAACTCTTCTTAATAAAACTTTAAAATTTGGCAAAAGTTTAGTTTGAGTTTTTAAAA ACTAGGAAGACAGACGAGAAAAAAGAAAACAGAGTCAGAGCTAAACAATGTTAACATTTTGGGTTTGCTACTCAA ${\tt CAAGCAGAAATCATTGTGTCTGCATTGGTCAAGATCCTGGAGGCCAACATGGACATCGTCTACAAAGATATGGTC}$ ACCAAGATGCAGCAGGAAATCACTTTTCAGCAAGTAATGTCTCAGATTGCGAATGTGAAAAAGGATATGATTATT TTGGAGAAGAGTGAATTTTCAGCCCTCAGAGCAGAAAATGAGAAAATAAAACTCGAACTACATCAGTTAAAACAA CAAGTAATGGATGAAGTGATCAAAGTCCGAACAGATACCAAATTAGACTTCAACCTAGAAAAAGAGCAGAGTAAAA GAATTGTATTCATTGAACGAAAAGAAGCTGCTGGAATTGAGAACAGAAATAGTGGCATTGCATGCCCAGCAAGAT CGGGCCCTTACCCAGACAGACAGGAAGATCGAAACTGAGGTTGCTGGCCTCAAAACCATGCTTGAGTCACACAAG $\tt CTTGATAATATTTAAATATTTAGCAGGGTCTATATTTACGTGCCTAACAGTAGCTCTGGGATTTTATCGCCTGTGG$

2633/2825 FIGURE 2343

 $\label{thm:cong} $$\operatorname{MDCGSVGQQRTQRLPGRQRLLFLPVGLSGRPGGSETSARRCPSALSDGLGALRPRAPAARGGVSRASPLLLLLLV$$$\operatorname{PSPRLAAAAPRRQLGDWERSRLGYAAPPAGRSGAWRCSPGVAAAAGALPQYHGPAPALVSCRRELSLSAGSLQLE$$$\operatorname{RKRRDFTSSGSRKLYFDTHALVCLLEDNESHSFIQAGVQWHSLGLLQPPPPGFKRSSHLILLSSWDYRHAPPHLD$$$\operatorname{NFSVFLLETGFHHVGQAGLKLLTSSDPPTLAS}$$

2634/2825 FIGURE 2344

ATTCCAAGTCGCTGCTGCAGAGCAGCAAGTGCTCCGTGCAGGGCTGTTGCTATCACTTGGAGGTGAACAGCCT CTTTTGCCGGTATTCAGTGAAGAAGCAAGTCTAAATATGCAGTTCTCTCACTGGAGTGAAAGATGTTTTGTTCA AATAAACACTGCTGGAACCAGTAATGCAGAAGTCCCCTTGGCTGATCCCGGAATGTACCAGCTGGACATTACATT AAGAAGGGTCAAAGTTTAGCTGCTCGAGATCGAGGAGGGACGAGTGATCCATATGTGAAGTTTAAAATCGGAGG AAAAGAAGTTTTTAGAAGTAAGATAATACACAAGAACCTCAACCCTGTGTGGGAAGAAAAAGCTTGTATTCTGGT TGATCATCTTAGGGAGCCATTGTATATAAAGGTATTTGACTATGATTTTGGACTACAGGATGACTTTATGGGCTC AGCCTTTCTGGATCTGACACAATTGGAGTTAAACAGGCCCACAGATGTGACCCTTACTCTGAAAGATCCTCATTA TCCTGACCATGATCTTGGAATCATTTTGCTCTCAGTCATCCTTACCCCTAAAGAAGGAGAGCTCCAGGGATGTGAC AATGCTAATGAGGAAGAGTTGGAAAAGATCAAGTAAGTTTCAGACCCAAAGTTTACGCCTATCAGACCTACACAG CGGGTTGAGCGATCCCTACGTGAAGTTCCGGCTTGGGCATCAGAAGTACAAGAGCAAGATTATGCCAAAAACGTT GGACAAAGATGCTGGGAAAAGGGATGATTTCATTGGCAGGTGCCAGGTCGACCTGTCAGCCCTCAGTAGGGAACA GACGCACAAGCTGGAGTTGCAGCTGGAAGAGGGTGAGGGACACCTGGTGCTGCTGGTCACTCTGACAGCATCAGC CACAGTCAGCATCTCTGACCTGTCAACTCCCTGGAGGACCAGAAGGAACGAGAGGAGATATTAAAGAAATA TAGCCCATTGAGGATATTTCACAACCTGAAAGATGTGGGATTTCTCCAGGTGAAAGTCATCAGAGCGGAAGGGTT AATGGCTGCCGACGTCACTGGAAAAAGTGACCCATTTTGTGTGGTAGAACTGAACAACGATAGACTGCTAACACA TACTGTCTACAAAAATCTCAATCCTGAGTGGAATAAAGTCTTCACGTTCAACATTAAAGATATCCATTCAGTTCT TGAAGTGACAGTTTATGATGAAGATCGGGATCGAAGTGCTGACTTTCTGGGCAAAGTTGCTATACCATTGCTGTC TATTCAAAATGGTGAACAGAAAGCCTACGTCTTGAAAAACAAGCAGCTGACAGGGGCCAACAAAGGGGGTCATCTA TCTTGAAATAGATGTGATTTTTAATGCTGTGAAAGCCAGCTTACGAACATTAATACCCAAAGAACAGAAGTACAT TGAAGAGGAAAACAGACTCTCTAAACAGCTGCTACTAAGAAACTTTATCAGAATGAAACGTTGTGTCATGGTGCT ${\tt GGTAAATGCTGCATACTACGTTAATAGTTGCTTTGATTGGGATTCACCCCCAAGGAGTCTCGCTGCTTTTGTGGT}$ AAATAAAATCTATGCCATCCAGGAGGTATGTGTCAGTGTCCAGAACATCCTAGATGAAGTGGCTTCCTTTGGCGA AGCCATCCTGTACTGCATTCCGCTGAGATACATTGTCCTTGTCTGGGGCATCAATAAATTTACAAAAAAGCTTCG GAGTCCATATGCAATTGATAACAATGAACTACTTGACTTCCTTTCCAGAGTCCCTTCAGATGTACAAGTGGTGCA CAGCAATGAGGAGACCAGCATCTGTTTGGGAAGATAAAAGAAAAAGCCCTCAGCCTCAGCAGCATTTCCTTTCTT TCTGCTTTTATTTATTTTGCCTTTTTATCATGATCGAGAGAATCTGTAAATAGTGTACAAAGGCATATGTCTTT GAATATATACTTCTATTGTACAGACTCAACTTGATAAAGGTTTTGCTACTGCTGTGTCAAAACCTTGTTAGCTGT GGATAATAATAACACACTGAAAGAACAAATATAAGAATGATAACACTGGAAGATATATTCTTATCTAATTACT AGTGGATTAAATACTCACCTGTGCTCTGATTAAATCTACATCAATTGT

2635/2825 FIGURE 2345

MLDSCKLKSACNLPFICNKKIINTAGTSNAEVPLADPGMYQLDITLRRGQSLAARDRGGTSDPYVKFKIGGKEVF
RSKIIHKNLNPVWEEKACILVDHLREPLYIKVFDYDFGLQDDFMGSAFLDLTQLELNRPTDVTLTLKDPHYPDHD
LGIILLSVILTPKEGESRDVTMLMRKSWKRSSKFQTQSLRLSDLHRKSHLWRGIVSITLIEGRDLKAMDSNGLSD
PYVKFRLGHQKYKSKIMPKTLNPQWREQFDFHLYEERGGVIDITAWDKDAGKRDDFIGRCQVDLSALSREQTHKL
ELQLEEGEGHLVLLVTLTASATVSISDLSVNSLEDQKEREEILKKYSPLRIFHNLKDVGFLQVKVIRAEGLMAAD
VTGKSDPFCVVELNNDRLLTHTVYKNLNPEWNKVFTFNIKDIHSVLEVTVYDEDRDRSADFLGKVAIPLLSIQNG
EQKAYVLKNKQLTGPTKGVIYLEIDVIFNAVKASLRTLIPKEQKYIEEENRLSKQLLLRNFIRMKRCVMVLVNAA
YYVNSCFDWDSPPRSLAAFVVVEDMLEDEEEEDDKDDKDSEKKGFINKIYAIQEVCVSVQNILDEVASFGERIKN
TFNWTVPFLSWLAIVALCVFTAILYCIPLRYIVLVWGINKFTKKLRSPYAIDNNELLDFLSRVPSDVQVVQYQEL
KPDPSHSPYKRKKNNLG

2636/2825 FIGURE 2346

CTGGGCTCGGGTGATCCTCCTGTCTTAGCCTTCCAAGGTGCTGGGATTACAGGTGTGGGCCACCATGCCCAGCCA $\verb|CCATCTTGGTTTAATTTCTTTCCTTGGAAATGGAGCAAAGGGCTTTCACTCTTCTTTTCATGGCTGCATAGTAT|\\$ TCCATAATTGTTTAAACAATTGATAATAGACACTGTATCGGGGTGACTGGTATACCCCCAAAATCACATCTGCCC AGAGCCTCAGGACATGGCCTTGTTTGGAA**ATG**GTTTTAGCAGATGCAGCTAAGATGAGGTCACCCCGTGTTAGGA TGGCCCCGAATCCAGTGCCTGGCACCCTTATAAGGAGAGGGAAACTTGGACGCAGACAGGAAGGCCGGGTGAAGA GACTCTCTCAGCCACAGAAGGGCCCAGCCCCGCACAGGCCTGGATTTCAGAGGGCGAACATTTCTGTGGCCGAAG CTCCCAGTGCGTTTGCAGTCCTTGGAGACGGCCGCAGACACATTTGTTCTTGGCCTGTCTCCAGGTCTGTAGCCC CTGGGAGGGCTCACCTGTAGGGAGGGCTCACCTGTACAGCGGTGCTGGGAAGCTGGCCTCGAGGGTCCCCGAG GGGATACAGGGCCGTGCAGCCTCTTGCCTGAGGGTTTGCATGTCTGCCTGGATCCCCCGGGCTCCTGCCAGAAGG CTGCGGGGTGAGGTGGCCTCGAGGGAAGGGCTGGAGAGTCGTTCTGAGTATTTAACAACTGGGGGTGACACAGTG TGGGTGGGCAAGGCCAGGGCCACTGCCAGGTGGGGTCCGTGGCCCTGAGCCCCCAGCTCTATGCACCCCCACCT GGGGTCTGGCTTCTCCATCTCCACACCCCCTTGAGGGGCTTCTGTCTCCCCCTGCCCCTTCGATCGCAGGAGGCA AAATACACCCAGGATGAGACCTGCACGCAAGTGGCTCACAGCAGCACGATTTGTGACAGCCCGAGGCGGAGAACA CCACAAGGAGGTGCGAAGCTCTGACCCAGGCCACAGTGCGGATGCACCTTGAGGATGTCACGCTCAGTGAGAGAC ACCAGACAGAAGGGTACGCTGTGATCCCACTTCTATGAAATGTCCAGGACAGACCAATCCACAGAATCAGGGA GAGGATTCGTGGGTGCCGGGACTGGGGGACCTGGGGGTGACTAGGTGACATAATGGGGACAGGGCTGCCT TCTGGGTGATGAGAATGTTCTGGAATCAGATGGGATGGCTGCACGGCGTGGTGAAGGTACTGAACGCCACCTCAC

2637/2825 FIGURE 2347

 ${\tt MVLADAAKMRSPRVRMAPNPVPGTLIRRGKLGRRQEGRVKTEAETGGQGVPGVAQSHHGLQEVWDRLSQPQKGPAPHPGFQRANISVAEAPSAFAVLGDGRRHICSWPVSRSVAPTVSGHWPEGNRKSWRGRHTHEPFRNNE}$

2638/2825 FIGURE 2348

TTTTCAGAGACTCGCCTGGCAGAGGCCTGGAGCGTCCTGCTGCGTGGACTGTGGGCACCGAGCCACCAGGAGGTT GTTGATCTCATTCTTGCTCACTGGTCCCTGCCAGACTGGTGGTGCCTCTCTACTGTCGGGCAGCCCCACCTCTGT GCTGCCCCATCCACCTACAGCCCTCATGCCTGGGGCCCAGCTGGAGGTTCTGACAGGGGCCCCCTGGGGTGGCATG CTCGCTGCTGTTGACTGTCCTTGAGCAGCCCCAGGGCCGGTTTCTCAACCTCATTTGCTCACCTGAGCAATGAAG TGAGGTGGGCTCCTGGAACTGCAGCAGCCACCCCCGGGGCCATCGTGAGGCTAAGAATCCAGTGCAGGGTGAGC TGCTGCAAAAAGCAAGAGTGGGCTTTGGAGGCCAACGGATGGAGCGGATTCAGTCTGAGGCTGTTCCAGCCCTTG CTTAGGATCCACCTACCTAGGTCTGGAAATCGTATTTCCACTTCAGATGCCTTCTCAGAGGATAAAATAACCCCC GGTGGGGGAGAGTACTGGAAGAGGGCTAATTCCCCTGGTTTTCTCCCCATGAGCATTAGTGTCAGTGTAATTTTA GAGTGACCCCAGCT<u>ATC</u>TCACGTGTGGCAGGCACAAGAACAGATGTCAATGAGCTATTGCAGAGGTGGACACCCA GATGTGTGCGCTGGCACACTGGAGGGGCCCGTAGGGTGGCTCTAGACCGCCCCCTCGTGACGGCTTGCCTACCAC CTGCAGGCGACGTTGTGGACGTTTACCAGCGGGAGTTCCTGGCGCTGCGCGATCGGTTGCACGCAGCTGAGCAGG TGCGAGACGGAGACGGCAATCGCACCTGGGGCCGCCTAACAGAGGACCCCCGATTGAAGCCGTGGAACGGCTCAC ACCGGCACGTGCTGCACCTGCCCACCGTCTTCCATCACCTGCCACACCTGCTGGCCAAGGAGAGCAGTCTGCAGC CCGCGGTGCGCGTGGGCCAGGGCCGCACCGGAGTGTCGGTGGTGATGGGCATCCCGAGCGTGCGGCGCGAGGTGC ACTCGTACCTGACTGACACTCTGCACTCGCTCATCTCCGAGCTGAGCCCGCAGGAGAAGGAGGACTCGGTCATCG TGGTGCTGATCGCCGAGACTGACTCACAGTACACTTCGGCAGTGACAGAGAACATCAAGGCCTTGTTCCCCACGG AGATCCATTCTGGGCTCCTGGAGGTCATCTCACCCTCCCCCACTTCTACCCTGACTTCTCCCGCCTCCGAGAGT CCTTTGGGGACCCCAAGGAGAGTCAGGTGGAGGACCAAACAGAACCTCGATTACTGCTTCCTCATGATGTACG CGCAGTCCAAAGGCATCTACTACGTGCAGCTGGAGGATGACATCGTGGCCAAGCCCAACTACCTGAGCACCATGA AGAACTTTGCACTGCAGCAGCCTTCAGAGGACTGGATGATCCTGGAGTTCTCCCAGCTGGGCTTCATTGGTAAGA TGTTCAAGTCGCTGGACCTGAGCCTGATTGTAGAGTTCATTCTCATGTTCTACCGGGACAAGCCCATCGACTGGC TCCTGGACCATATTCTGTGGGTGAAAGTCTGCAACCCCGAGAAGGATGCGAAGCACTGTGACCGGCAGAAAGCCA AACTGAAGGACAAAGACTTTGGAAAGCAGGCGCTGCGGAAGGAGCATGTGAACCCGCCAGCAGAGGTGAGCACGA GCCTGAAGACATACCAGCACTTCACCCTGGAGAAAGCCTACCTGCGCGAGGACTTCTTCTGGGCCTTCACCCCTG CCGCGGGGGACTTCATCCGCTTCCCCAACCTCTAAGACTGGAGCGGTTCTTCTTCCGCAGTGGGAACA AGGCCCTGCAGGAGGGCCGCCACCCCCCCGGTACCCTCGGAGCCCCGACGGCTACCTCCAGATCGGCTCCT TCTACAAGGGAGTGGCAGAGGGAGAGGTGGACCCAGCCTTCGGCCCTCTGGAAGCACTGCGCCTCTCGATCCAGA ${ t CGGACTCCCCTGTGTGGGTGATTCTGAGCGAGATCTTCCTGAAAAAGGCCGAC{ t TAA}{ t CTGCGGGCTTCTGAGGGT}}$ ACCCTGTGGCCAGCCCTGAAGCCCACATTTCTGGGGGTGTCGTCACTGCCGTCCCCGGAGGGCCAGATACGGCCC GGTGCTGCCCCGCCGGCCGGGCCGGAGGAGGCAGGCGCCCCACACTGTGCCTGAGGCCCGGAACCGTTCG CACCCGGCCTGCCCCAGTCAGGCCGTTTTAGAAGAGCTTTTACTTGGGCGCCCCGCCGTCTCTGGCCGCAACACTG ACTTCTATAAGAGCGTGACTTGTAATAAAGGGTTAATGAAG

2639/2825 FIGURE 2349

MSRVAGTRTDVNELLQRWTPRCVRWHTGGARRVALDRPLVTACLPPAGDVVDVYQREFLALRDRLHAAEQESLKR SKELNLVLDEIKRAVSERQALRDGDGNRTWGRLTEDPRLKPWNGSHRHVLHLPTVFHHLPHLLAKESSLQPAVRV GQGRTGVSVVMGIPSVRREVHSYLTDTLHSLISELSPQEKEDSVIVVLIAETDSQYTSAVTENIKALFPTEIHSG LLEVISPSPHFYPDFSRLRESFGDPKERVRWRTKQNLDYCFLMMYAQSKGIYYVQLEDDIVAKPNYLSTMKNFAL QQPSEDWMILEFSQLGFIGKMFKSLDLSLIVEFILMFYRDKPIDWLLDHILWVKVCNPEKDAKHCDRQKANLRIR FKPSLFQHVGTHSSLAGKIQKLKDKDFGKQALRKEHVNPPAEVSTSLKTYQHFTLEKAYLREDFFWAFTPAAGDF IRFRFFQPLRLERFFFRSGNIEHPEDKLFNTSVEVLPFDNPQSDKEALQEGRTATLRYPRSPDGYLQIGSFYKGV AEGEVDPAFGPLEALRLSIQTDSPVWVILSEIFLKKAD

2640/2825 FIGURE 2350

GGCAAATGGGCTTGGGCGGCTCCTCGGCGGGTGGCGGTGGCCGTAGCGGTTCCTCCTGGCCCTGTTAATGTC $\mathtt{ACCGGCC}$ CTCTTGGGGCCAGCTGGTGGAGGCGATAGACGAGTATCAGATATTAGCAAGACATCTACAAAAGGAGGCCCAAGC TCAACACAATAATTCTGAATTCACAGAAGAACAAAAGAAAACCATAGGCAAAATTGCAACATGCTTGGAATTGCG AAGTGCAGCTTTACAGTCCACACAGTCTCAAGAAGAATTTAAACTGGAGGACCTGAAGAAGCTAGAACCAATCCT AAAGAATATTCTTACATATAAAGAATTCCCATTTGATGTTCAGCCTGTCCCATTAAGAAGAATTTTGGCACC TCCTGCTAGAGTTCCCGGTACTTTATTACCAAGGTTGCCATCGGAACCAGGAATGACATTACTCACTATCAGAAT TGAGAAAATTGGTTTGAAAGATGCTGGGCAGTGCATCGATCCCTATATTACAGTTAGTGTAAAGGATCTGAATGG CATAGACTTAACTCCTGTGCAAGATACTCCTGTGGCTTCAAGAAAAGAAGATACATATGTTCATTTTAATGTGGA CATTGAGCTCCAGAAGCATGTTGAAAAATTAACCAAAGGTGCAGCTATCTTCTTTGAATTCAAACACTACAAGCC TAAAAAAAGGTTTACCAGCACCAAGTGTTTTGCTTTCATGGAGATGGAAATTAAACCTGGGCCAATTGTAAT ${ t TCTACATCAAACTTTGCACAAGGAA{ t TGA}{ t TCCTGACATGATGAACCTGGAACTTCTGTGAATTTTACCACTCAGTA}$ GGACGGAGTCCAATGCAAAGCTGTACCACAGAATTCAGAGTCCAGCACATCACACTGACGTATAGGACTCCTTGG GATACAGGTTTATTGTAGATTTTGAAACATGTTTTTACTTTTCTATTAATTGTGCAATTAATAGTCTATTTTCTA ATTTACCACTACTCCTACCCTGCTTCCTGGAACAATACTGTTGTGGGTAGGATGTGCTCATCTTCAGACTTAATA CAGCAATAAGAATGTGCTAGAGTTTACACATCTGTTCACTTTTGCTCCAATATGCTCTTTTGACTTAACGTCAAG CTTTGGGTTGATGTGGGTAGGGTAGTGTCAAACTGCTTTGAGAGGAATGGGACCAGTTCTGCTGCCTAAGAAGGT CTGTCTGGATGTTTATAGGCAGCACCTCTGAAGTGGCCTAAATTCACCCTGATCTGATAGTTTTCCTGCTTAGAA AGTGTGCCTTGGCCAGATCAGTATCCCACATGGGAGTGTTCCCTAGGTTGTAGCTGTGATTGTTTCCAGATGACC AGATTGTTTTTCTGAAAATGAGCATATTTTTAGTCATGTCGATTAGCTGTTCTTCTACATCACATTGTTACTCTT TCTGATGATGATCTAGGGTTAACATTGGAACCATCTCAAAATAATTACAAAGTTTTAGATGGGTTTACAATGTC TTCTAAACAATGTAATCTAAAAATAATTGAGTCAGATGCTAACGAGATACTGCAGGCATAACTGCTGTTTTTCTG ACAACTGATTGTGAAACCTTAAAACCTGCATACCTCTTCTTACAGTGAGGAGTATGCAAAATCTGGAAAGATATT CTATTTTTTTATATAGGTAGATAGGATCGCCATTTATTTCCTATTTAGATATACTGACATTCATCCATATGAAA AGGTGGATATTTGATACACAGAACATTTGCGGTGGGCTTTCTGTGGGTTAGATGTAAAGCCCACATATTTTAATA TTCACTATTTTAAATGAGCAATGCATGAGGGGAATGCAGTGTCAGTACCTGGCCTATTTTTAAACTAGTGTAATC ACCCTAGTCATACCATTCAGTATGTTTGCTTTTTAAAATAAGTAACCACAATTAAGTTGTTGTAGCCCTTGCACT TCAAGAGATCTAGTCTTTACTTTCAGTTGTCTGTTAGGTCCATTCTGTTTACTAGACGGATGTTAATAAAAACTA TGCGAGCCTG

FIGURE 2351

MSEVTRSLLQRWGASFRRGADFDSWGQLVEAIDEYQILARHLQKEAQAQHNNSEFTEEQKKTIGKIATCLELRSA ALQSTQSQEEFKLEDLKKLEPILKNILTYNKEFPFDVQPVPLRRILAPGEEENLGFEEDEEEGGAGAGSPDSFPA RVPGTLLPRLPSEPGMTLLTIRIEKIGLKDAGQCIDPYITVSVKDLNGIDLTPVQDTPVASRKEDTYVHFNVDIE LQKHVEKLTKGAAIFFEFKHYKPKKRFTSTKCFAFMEMDEIKPGPIVIELYKKPTDFKRKKLQLLTKKPLYLHLH QTLHKE

2642/2825 FIGURE 2352

CTCCCGGCCTCCCTGGTCCCGCCTGGGAAGGGATGCAAGGAAGCCCTCCGGCGCTCCGAGGCGGAGACA GCGTCCCCTCCGCCCTCGGGTCCTGGCGCCTCAGAGCCCGGCCCAGGCCGGAACGGTGATGCTCGGGCCGG ACGGGCGGCGCGGATCCCTGCGTCCCGCTGAAAATGTGTGTCTGACATGCAAGCTCAGTGGGGCAGAGACCCGT ${\tt GGATTGCTGTGCCCTGCCCTCCGGACCTGGATC}$ ARGGTGTTGGGAAGAAGCTTCTTCTGGGTGCTGTTTCCC GTCCTTCCCTGGGCGGTGCAGGCTGTGGAGCACGAGGAGGTGGCGCAGCGTGTGATCAAACTGCACCGCGGGCGA GGGGTGGCTGCCATGCAGAGCCGGCAGTGGGTCCGGGACAGCTGCAGGAAGCTCTCAGGGCTTCTCCGCCAGAAG AATGCAGTTCTGAACAAATTGAAAACTGCAATTGGAGCAGTGGAGAAAGACGTGGGCCTGTCGGATGAAGAGAAA TACGGACTGCAGAGAGCCCTGCAGGGGGATTACAAAGATGTCGTGAACATGAAGGAGAGCAGCCGGCAGCCCTG GAGGCCCTGAGAGAGGCTGCAATAAAGGAAGAAACAGAATATATGGAACTTCTGGCAGCAGAAAAAACATCAAGTT GAAGCCCTTAAAAATATGCAACATCAAAACCAAAGTTTATCCATGCTTGACGAGATTCTTGAAGATGTAAGAAAG GCAGCGGATCGTCTGGAGGAAGAGATAGAGGAACATGCTTTTGACGACAATAAATCAGTCAAGGGGGTCAATTTT GAGGCAGTTCTGAGGGTGGAGGAAGGAGGGCCAATTCTAAGCAAAATATAACAAAACGAGAAGTGGAGGATGAC TTGGGTCTTAGCATGCTGATTGACTCCCAGAACAACCAGTATATTTTTGACCAAGCCCAGAGATTCAACCATCCCA GCCATAGGATTGCCTACAATGTTTGGTTATATTATTTGTGGTGTACTTCTGGGACCTTCAGGACTAAATAGTATT AAGTCTATTGTGCAAGTGGAGACATTAGGAGAATTTGGGGTGTTTTTTACTCTTTTTTCTTGTTGGTTTAGAATTT TCTCCAGAAAAGCTAAGAAAGGTGTGGAAGATTTCCTTACAAGGGCCGTGTTACATGACACTGTTAATGATTGCA TCAAGCACCCCTCGTGTCCAGGTTCCTCATGGGCAGTGCTCGGGGTGACAAAGAAGGCGACATTGACTACAGC ACCGTGCTCCTCGGCATGCTGGTGACGCAGGACGTGCAGCTCGGGCTCTTCATGGCCGTCATGCCGACTCTCATA CAGGCGGCCCCAGTACATCTTCTAGCATTGTCGTGGAAGTTCTCCGAATCCTGGTTTTGATTGGTCAGATTCTT TTTTCACTAGCGGCGGTTTTTCTTTTATGTCTTGTTATAAAGAAGTATCTCATTGGACCCTATTATCGGAAGCTG CACATGGAAAGCAAGGGGAACAAAGAAATCCTGATCTTGGGAATATCTGCCTTTATCTTCTTAATGTTAACGGTA $\mathtt{ATTCTCAAACTATGTGTTATTTATGTAATC}$ TACATAATCTCTTTCACTGAAATCTTGTGATCCATTCTTTAC AAAA

2643/2825 FIGURE 2353

MKVLGRSFFWVLFPVLPWAVQAVEHEEVAQRVIKLHRGRGVAAMQSRQWVRDSCRKLSGLLRQKNAVLNKLKTAI GAVEKDVGLSDEEKLFQVHTFEIFQKELNESENSVFQAVYGLQRALQGDYKDVVNMKESSRQRLEALREAAIKEE TEYMELLAAEKHQVEALKNMQHQNQSLSMLDEILEDVRKAADRLEEEIEEHAFDDNKSVKGVNFEAVLRVEEGEA NSKQNITKREVEDDLGLSMLIDSQNNQYILTKPRDSTIPRADHHFIKDIVTIGMLSLPCGWLCTAIGLPTMFGYI ICGVLLGPSGLNSIKSIVQVETLGEFGVFFTLFLVGLEFSPEKLRKVWKISLQGPCYMTLLMIAFGLLWGHLLRI KPTQSVFISTCLSLSSTPLVSRFLMGSARGDKEGDIDYSTVLLGMLVTQDVQLGLFMAVMPTLIQAGASTSSSIV VEVLRILVLIGQILFSLAAVFLLCLVIKKYLIGPYYRKLHMESKGNKEILILGISAFIFLMLTVILKLCVIYVI

2644/2825 FIGURE 2354A

CTCCTCCTCCGTCTCCTCTCTCTCTCTCTGTGTGGTTATCGCCTGTCGCTGGAGCACAAAAGAGTCTCCG CGGTGGAGGTCTGCGTTGCTTTTCCTCGCTGGGGTGTACGGAAATGGTGCTCTTGCAGAACATTCTGAA AATGTGCATATTCAGGAGTGTCAACTGCTTGTGGAGAGACTCCAGAGCAAATACGAGCACCAAGTGGCATAATC ACAAGCCCAGGCTGGCCTTCTGAATATCCTGCAAAAATCAACTGTAGCTGGTTCATAAGGGCAAACCCAGGCGAA ATCATTACTATAAGTTTTCAGGATTTTGATATTCAAGGATCCAGAAGGTGCAATTTGGACTGGTTGACAATAGAA ACATACAAGAATATTGAAAGTTACAGAGCTTGTGGTTCCACAATTCCACCTCCGTATATCTCTTCACAAGACCAC ATCTGGATTAGGTTTCATTCGGATGACAACATCTCTAGAAAGGGTTTCAGACTGGCATATTTTTCAGGGAAATCT GAGGAACCAAATTGTGCTTGTGATCAGTTTCGTTGTGGTAATGGAAAGTGTATACCAGAAGCCTGGAAATGTAAT AACATGGATGAATGTGGAGATAGTTCCGATGAAGAGATCTGTGCCAAAGAAGCAAATCCTCCAACTGCTGCTGCT TTTCAACCCTGTGCTTACAACCAGTTCCAGTGTTTATCCCGTTTTTACCAAAGTTTACACTTGCCTCCCCGAATCT TTAAAATGTGATGGGAACATTGACTGCCTTGACCTAGGAGATGAGATAGACTGTGATGTGCCAACATGTGGGCAA TGGCTAAAATATTTTTATGGTACTTTTAATTCTCCCAATTATCCAGACTTTTATCCTCCTGGAAGCAATTGCACC TGGTTAATAGACACTGGTGATCACCGTAAAGTCATTTTACGCTTCACTGACTTTAAACTTGATGGTACTGGTTAT GGTGATTATGTCAAAATATATGATGGATTAGAGGAGAATCCACACAAGCTTTTGCGTGTGTTGACAGCTTTTGAT ${\tt TCTCATGCACCTCTTACAGTTGTTTCTTCTTCTGGACAGATAAGGGTACATTTTTGTGCTGATAAAGTGAATGCT}$ GCAAGGGGATTTAATGCTACTTACCAAGTAGATGGGTTCTGTTTGCCATGGGAAATACCCTGTGGAGGTAACTGG GGGTGTTATACTGAGCAGCAGCGTTGTGATGGGTATTGGCATTGCCCAAATGGAAGGGATGAAACCAATTGTACC ATGTGCCAGAAGGAAGAATTTCCATGTTCCCGAAATGGTGTCTGTTATCCTCGTTCTGATCGCTGCAACTACCAG CGTTGTGTTTTGAAAGTTGGGTGTGTGTGATTCTCAAGATGACTGTGGTGATGGCAGCGATGAAGAAAATTGCCCA GTAATCGTGCCTACAAGAGTCATCACTGCTGCCGTCATAGGGAGCCTCATCTGTGGCCTGTTACTCGTCATAGCA TTGGGATGTACTTGTAAGCTTTATTCTCTGAGAATGTTTGAAAGAAGATCATTTGAAACACAGTTGTCAAGAGTG GAAGATTTTCCTGTTTGTTCACCTAATCAGGCTTCTGTTTTGGAAAATCTGAGGCTAGCGGTACGATCTCAGCTT GGATTTACTTCAGTCAGGCTTCCTATGGCAGGCAGATCAAGCAACATTTGGAACCGTATTTTTAATTTTGCAAGA GAACCTGAGAGAATCATACTCACAGAAGTTTGTTTTCCGTGGAGTCTGATGATACAGACACAGAAAATGAGAGA GCGACAGTAGGAGCATGTGCAAGTTCCTCAACTCAGAGTACCCGAGGTGGTCATGCAGATAATGGAAGGGATGTG ACAAGTGTGGAACCCCCAAGTGTGAGTCCAGCACGTCACCAGCTTACAAGTGCACTCAGTCGTATGACTCAGGGG CTACGCTGGGTACGTTTTACATTAGGACGATCAAGTTCCCTAAGTCAGAACCAGAGTCCTTTGAGACAACTTGAT AATGGGGTAAGTGGAAGAGATGATGATGATGTTGAAATGCTAATTCCAATTTCTGATGGATCTTCAGACTTT GATGTGAATGACTGCTCCAGACCTCTTCTTGATCTTGCCTCAGATCAAGGACAAGGGCTTAGACAACCATATAAT GCAACAAATCCTGGAGTAAGGCCAAGTAATCGAGATGGCCCCTGTGAGCGCTGTGGTATTGTCCACACTGCCCAG $\tt ATACCAGACACTTGCTTAGAAGTAACACTGAAAAACGAAACGAGTGATGATGAGGCTTTGTTACTTTGT \\ \underline{\textbf{TAG}} \\ \texttt{GTA}$ CGAATCACATAAGGGAGATTGTATACAAGTTGGAGCAATATCCATTTATTATTTTTGTAACTTTACAGTTAAACTA GTTTTAGTTTAAAAAGAAAAATGCAGGGTGATTTCTTATTATTATTATGTTAGCCTGCATGGTTAAATTCGACAA $\tt CTTGTAACTCTATGAACTTAGAGTTTACTATTTTAGCAGCTAAAAATGCATCACATATTCATATTGTTCAATAAT$ GTCCTTTCATTTGTTTCTGATTGTTTTCATCCTGATACTGTAGTTCACTGTAGAAATGTGGCTGCTGAAACTCAT TATACTCACCTGCGTTTTCATTTGTTTGACATTTGTCTATTATTGGATTTCATTATCATATGAACTTGTCAGTGG GAAACAAACTGTCTAAAAATTTTTCTCTTACGTTTAACATACAATCATGTGAAAATTTAGGCAGAGTTCGATAAAT TACTGGCAAAAACAAAACTCTTTTATAAAGATTTTCTAATGTTGACTTTAATACTCTAACATGGTACAAACCAAA TGGTAAAATCCCAAGTCATTTCTTTTTCATCTCTATTTAGCAACAGAATTAAGTGGATGAAGATATTCTACTAT GCATTAAATCTTGAACTTTATAAAACATGTACAAAAATTGTACAAGATAAGTTCCACCTGGTAATGTCTTTCCCT $\verb|AATACAGGGTTGCGCTTGCATTGGACCCTAGGGATTTGCACTAAAATTATATCAAGGTCTCAGATGAGCTTAGTG|$ CACAAGCACTATCACTTTAAATACTATTATTTGCTACCACAGCAACTATATATTTCCATAGCTTTTGGCTGGGGG